

**NUS**  
CORPORATION

1927 LAKESIDE PARKWAY  
SUITE 614  
TUCKER, GEORGIA 30084  
404-938-7710

45760

C-586-3-7-106

March 31, 1987

Mr. Richard D. Green  
Emergency and Remedial Response Branch  
Waste Management Division  
Environmental Protection Agency  
345 Courtland Street, N. E.  
Atlanta, Georgia 30365

Subject: Well Inventory and HRS Scoring of Selected Sites  
General Refining Company, TDD #: F4-8703-11  
Georgia Pacific Corporation, TDD #: F4-8703-12  
Union Camp Company, TDD #: F4-8703-13

Dear Mr. Green:

On March 17, 18, and 19, 1987, two members of NUS Corporation FIT Region IV conducted a well inventory of an area in western Chatham County, Georgia. Tom Sherrod and Greg Schank inventoried those residences within a 3-mile radius of the General Refining Company Site, the Georgia-Pacific Corporation Site, and the Union Camp Company Site, for the purpose of determining the number of private shallow wells (less than 150 ft.) in use, and population served from these wells. This information was used to assist in the HRS scoring of these sites.

Site locations of the General Refining Company, Georgia-Pacific Corporation, and Union Camp Company (labeled A, B, and C, respectively) are shown on Figure 1. Also shown are the areas within a 3-mile radius of each site.

A total of five (5) shallow wells serving nine (9) homes was confirmed by this survey. In each instance, the well owner or a resident was present to supply information about the shallow well. Locations of these wells are shown on Figure 2, and available information is given on the attached well inventory forms. Each owner was also asked if any other shallow wells were in use in the vicinity. The number of unconfirmed shallow wells totalled five (5) from this information, with these wells serving eight (8) additional houses.

As seen in Figure 1, the areas surrounding each site are predominantly within municipal districts, and thus have access to city water supplies. Figure 2 shows the extent of municipal water lines (crosshatched area) as best determined from the survey. No distinction is made between the water facilities operated by Savannah, Garden City, or Port Wentworth. Savannah Municipal Airport (Travis Field) and the surrounding area are also known to have access to a municipal supply. Those portions of the 3-mile radii that are not shown on the eastern side of the map all lie within the city of Savannah, and are on city water.

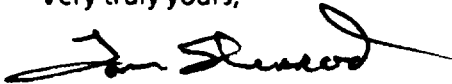
Mr. Richard Green  
Environmental Protection Agency  
March 31, 1987 - Page 2

A large portion of the survey area is occupied by commercial and industrial sites. Industry is especially prevalent along the Savannah River front, and these sites are presumed to have deep wells. The majority of private residences polled also had deep wells, or received their water from a nearby deep well. Telephone interviews with local well drillers (see attached telecon notes) also confirms the scarcity of shallow wells in the area.

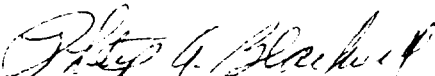
Also included in this report are the Hazard Ranking System (HRS) scores generated using this new information. In no instance does the composite migration score closely approach the threshold value of 28.5. The small number of shallow wells tapping the aquifer of concern severely limits the target population served in the area. Given the available data, these three sites do not qualify as candidates for the National Priorities List.

Please contact me here at NUS if you have any questions concerning the results of this survey.

Very truly yours,



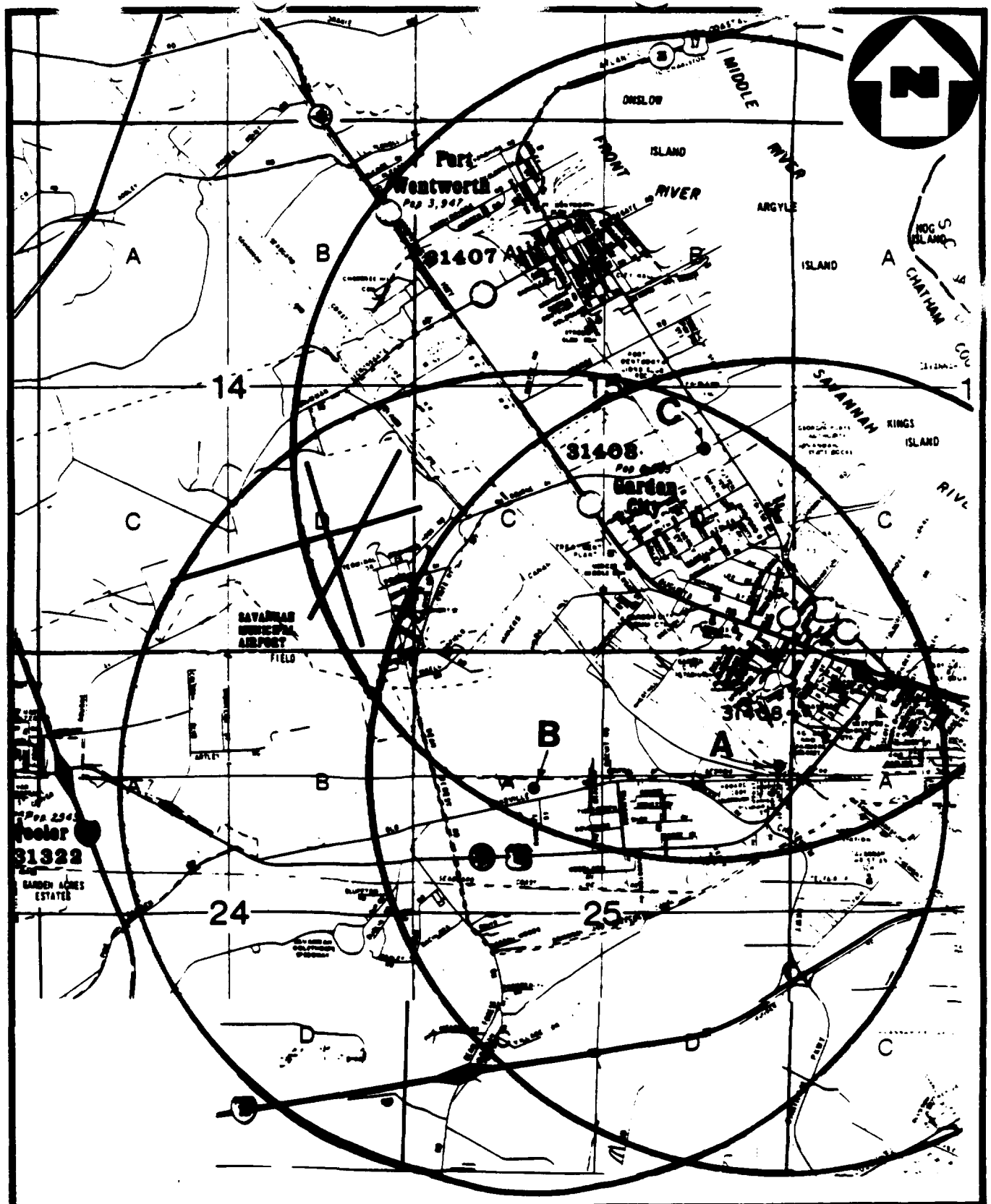
Tom Sherrod

  
Approval

TS/eaw

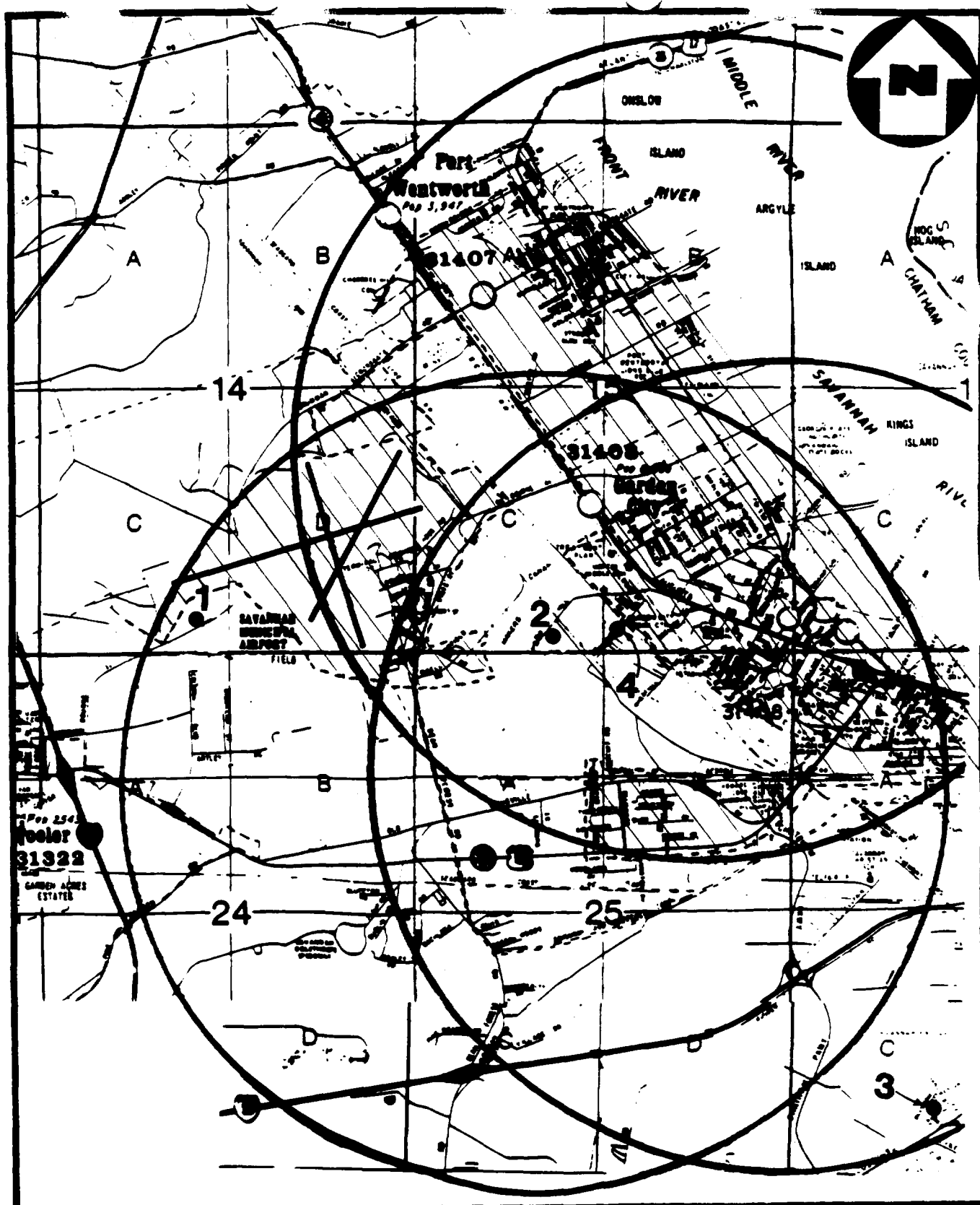
cc: Ray Wilkerson

Attachments: (13)



**SITE LOCATIONS AND  
3 - MILE RADII FOR  
CHATHAM COUNTY WELL INVENTORY**

**FIGURE 1**



**SHALLOW WELLS AND  
MUNICIPAL WATER  
LINES WITHIN STUDY AREA**

**FIGURE 2**

#1

# WELL INVENTORY FORM

OWNER

Name & Address of Resident

Telephone

[Redacted Owner Information]

WELL INFORMATION

Approximate Location of Well

Date Well Drilled

Driller or Installer

Depth of Well ~ 100 ft

Casing Type

Diameter

Screened Interval

Type of Pump Jet

Pump Setting or Yield

Surface

Well Use Domestic

Number of Users

2 houses

Any Tests Performed on Well

Any Problems Noted by Well Owner

NONE

Owner said that 3 houses nearby were also on wells of similar depth. These owners were not at home to confirm.

GENERAL INFORMATION

Approximate Distance to Site

Approximate Elevation

Estimated Static Water Level

Below Land Surface

Soil Type

Zone of Influence

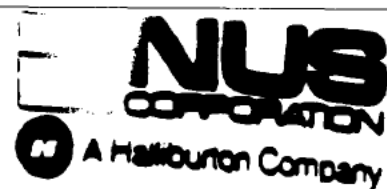
Comments

NUS Representative

Date

#2-A

## WELL INVENTORY FORM



OWNER

Name &amp; Address of Resident

Telephone

WELL INFORMATION

Approximate Location of Well

Date Well Drilled

Driller or Installer

Depth of Well ~ 25 ft

Casing Type

Diameter

Screened Interval

Type of Pump JET

Pump Setting or Yield

SurfaceWell Use DOMESTIC

Number of Users

2 houses

Any Tests Performed on Well

Any Problems Noted by Well Owner

Owner suggested that two neighboring houses  
were on shallow wells (325 Big Hill Rd).  
These owners not home to confirm.

GENERAL INFORMATION

Approximate Distance to Site

Approximate Elevation

Estimated Static Water Level

Below Land Surface

Soil Type

Zone of Influence

Comments

NUS Representative

Date

#2-13

# WELL INVENTORY FORM



OWNER

Name & Address of Resident

Telephone

[Redacted area for Name & Address of Resident and Telephone]

WELL INFORMATION

Approximate Location of Well

Date Well Drilled

Driller or Installer

Depth of Well ~ 125 ft

Casing Type

Diameter

Screened Interval

Type of Pump

JET

Pump Setting or Yield

SURFACE

Well Use

DOMESTIC

Number of Users

1 HOUSE

Any Tests Performed on Well

Any Problems Noted by Well Owner

GENERAL INFORMATION

Approximate Distance to Site

Approximate Elevation

Estimated Static Water Level

Below Land Surface

Soil Type

Zone of Influence

Comments

NUS Representative

Date

#3

# WELL INVENTORY FORM

OWNER

Name & Address of Resident

Telephone

WELL INFORMATION

Approximate Location of Well

Date Well Drilled

Driller or Installer

Depth of Well ~60-65 ft

Casing Type

Diameter

Screened Interval

Type of Pump JET

Pump Setting or Yield SURFACE

Well Use DOMESTIC

Number of Users 2 Houses

Any Tests Performed on Well

Any Problems Noted by Well Owner

HARD WATER

DID NOT KNOW OF ANY OTHER SHALLOW WELLS NEARBY.

GENERAL INFORMATION

Approximate Distance to Site

Approximate Elevation

Estimated Static Water Level

Below Land Surface

Soil Type

Zone of Influence

Comments

NUS Representative

Date





## WELL INVENTORY FORM

#4

OWNER

Name & Address of Resident

Telephone

WELL INFORMATION

Approximate Location of Well

Date Well Drilled

Driller or Installer

Depth of Well ~ 50 ft

Casing Type

Diameter

Screened Interval

Type of Pump

JET

Pump Setting or Yield

SURFACE

Well Use DOMESTIC

Number of Users

2 HOUSES

Any Tests Performed on Well

Any Problems Noted by Well Owner

OWNER suggested 2 or 3 more neighboring houses were on shallow wells. THESE WERE NOT CONFIRMED.

GENERAL INFORMATION

Approximate Distance to Site

Approximate Elevation

Estimated Static Water Level

Below Land Surface

Soil Type

Zone of Influence

Comments

NUS Representative

Date

**NUS CORPORATION AND SUBSIDIARIES**
**TELECON NOTE**
**CONTROL NO:**
**DATE:**

3-17-87

**TIME:**
**DISTRIBUTION:**

Files

**BETWEEN:**

Mr. Paul Clawson

**OF:**

 services  
Paul Clawson Drilling

**PHONE:**

(912 ) 897-1806

**AND:**

Greg Shank

*AS*
**DISCUSSION:**

Mr. Clawson said that he has been installing well for 17 years and had installed a few shallow wells. He said there maybe 4 or 5 along Old Louisville Rd, but overall there were very few in our area of concern. The wells along Old Louiseville Rd. were the only ones he could recall.

**ACTION ITEMS:**

# NUS CORPORATION AND SUBSIDIARIES

TELECON NOTE

CONTROL NO:	DATE: 3-17-87	TIME:
DISTRIBUTION:  Files		
BETWEEN: Mr. Whitaker	OF: Coastal Well Service	PHONE: (912 ) 232-5655
AND: Greg Schank AS		
DISCUSSION: <p>Asked about shallow wells in Garden City area. Mr. Whitaker said he knew of no shallow wells in that area, and that he did not install shallow wells. He told me that the state did not allow shallow wells to be installed for drinking water purposes.</p>		
ACTION ITEMS:		

# NUS CORPORATION AND SUBSIDIARIES

TELECON NOTE

CONTROL NO:

DATE:

3-17-87

TIME:

DISTRIBUTION:

Files

BETWEEN:

Mr. Turner

OF:

Turner Well Drilling

PHONE:

(912 ) 748-0285

AND:

Greg Schank

DISCUSSION:

Mr. Turner said he knew of no shallow wells in the area around Garden City used for drinking water. He said that shallow wells were used for lawn and garden watering. He did not install shallow wells.

ACTION ITEMS:

HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

GEORGIA PACIFIC CORP SAVANNAH 4  
EPA SITE NUMBER GAD990741332  
SAVANNAH  
CHATHAM COUNTY, GA  
EPA REGION: 4

SCORE STATUS: IN PREPARATION

SCORED BY T. SHERROD  
OF NUS CORPORATION  
ON 03/31/87

DATE OF THIS REPORT: 03/31/87  
DATE OF LAST MODIFICATION: 03/31/87

GROUND WATER ROUTE SCORE : 30.69  
SURFACE WATER ROUTE SCORE: 8.58  
AIR ROUTE SCORE : 0.00

-----  
MIGRATION SCORE : 18.42

## HRS GROUND WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	YES	45	45
2. ROUTE CHARACTERISTICS			
DEPTH TO WATER TABLE			
DEPTH TO BOTTOM OF WASTE			
DEPTH TO AQUIFER OF CONCERN			
PRECIPITATION			
EVAPORATION			
NET PRECIPITATION			
PERMEABILITY			
PHYSICAL STATE			
TOTAL ROUTE CHARACTERISTICS SCORE:			N/A
3. CONTAINMENT			N/A
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE: ARSENIC			18
WASTE QUANTITY CUBIC YDS	312		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	312 CU. YDS	5	5
TOTAL WASTE CHARACTERISTICS SCORE:			23
5. TARGETS			
GROUND WATER USE		3	9
DISTANCE TO NEAREST WELL	5000 FEET		
AND	MATRIX VALUE	8	8
TOTAL POPULATION SERVED	19 PERSONS		
NUMBER OF HOUSES	5		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			17
GROUND WATER ROUTE SCORE (Sgw) = 30.69			

## HRS SURFACE WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
SITE LOCATED IN SURFACE WATER	NO		
SITE WITHIN CLOSED BASIN	NO		
FACILITY SLOPE	0.9 %		
INTERVENING SLOPE	1.0 %	0	0
24-HOUR RAINFALL	3.8 INCHES	3	3
DISTANCE TO DOWN-SLOPE WATER	3000 FEET	2	4
PHYSICAL STATE	3		3
TOTAL ROUTE CHARACTERISTICS SCORE:			10
3. CONTAINMENT	3		3
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE: ARSENIC			18
WASTE QUANTITY CUBIC YDS	312		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	312 CU. YDS	5	5
TOTAL WASTE CHARACTERISTICS SCORE:			23
5. TARGETS			
SURFACE WATER USE		2	6
DISTANCE TO SENSITIVE ENVIRONMENTS		1	2
COASTAL WETLANDS	NONE		
FRESH-WATER WETLANDS	2500 FEET		
CRITICAL HABITAT	NONE		
DISTANCE TO STATIC WATER	> 3 MILES		
DISTANCE TO WATER SUPPLY INTAKE	> 3 MILES		
AND MATRIX VALUE		0	0
TOTAL POPULATION SERVED	0		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			8
SURFACE WATER ROUTE SCORE (S <sub>SW</sub> ) = 8.58			

HRS AIR ROUTE SCORE

<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1. OBSERVED RELEASE	NO	0	0

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2. WASTE CHARACTERISTICS

REACTIVITY:

MATRIX VALUE

INCOMPATIBILITY

TOXICITY

WASTE QUANTITY CUBIC YARDS  
DRUMS  
GALLONS  
TONS

TOTAL

TOTAL WASTE CHARACTERISTICS SCORE:

N/A

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3. TARGETS

POPULATION WITHIN 4-MILE RADIUS

0 to 0.25 mile  
0 to 0.50 mile  
0 to 1.0 mile  
0 to 4.0 miles

DISTANCE TO SENSITIVE ENVIRONMENTS

COASTAL WETLANDS  
FRESH-WATER WETLANDS  
CRITICAL HABITAT

DISTANCE TO LAND USES

COMMERCIAL/INDUSTRIAL  
PARK/FOREST/RESIDENTIAL  
AGRICULTURAL LAND  
PRIME FARMLAND  
HISTORIC SITE WITHIN VIEW?

TOTAL TARGETS SCORE:

N/A

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AIR ROUTE SCORE (Sa) = 0.00



HAZARD RANKING SYSTEM SCORING CALCULATIONS  
FOR  
SITE: GEORGIA PACIFIC CORP SAVANNAH 4  
AS OF 03/31/87

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GROUND WATER ROUTE SCORE

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OBSERVED RELEASE                    45  
WASTE CHARACTERISTICS    X   23  
TARGETS                                X   17

$$= \frac{17595}{57,330} \times 100 = 30.69 = S_{gw}$$

SURFACE WATER ROUTE SCORE

---

ROUTE CHARACTERISTICS            10  
CONTAINMENT                        X   3  
WASTE CHARACTERISTICS    X   23  
TARGETS                                X   8

$$= \frac{5520}{64,350} \times 100 = 8.58 = S_{sw}$$

AIR ROUTE SCORE

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OBSERVED RELEASE                    0 / 35,100    X   100 =    0.00 =  $S_{air}$

SUMMARY OF MIGRATION SCORE CALCULATIONS

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	<u>S</u>	<u>S<sup>2</sup></u>
GROUND WATER ROUTE SCORE ( $S_{gw}$ )	30.69	941.88
SURFACE WATER ROUTE SCORE ( $S_{sw}$ )	8.58	73.62
AIR ROUTE SCORE ( $S_{air}$ )	0.00	0.00
$S_{gw}^2 + S_{sw}^2 + S_{air}^2$		1015.50
$\sqrt{(S_{gw}^2 + S_{sw}^2 + S_{air}^2)}$		31.87
$S_M = \sqrt{(S_{gw}^2 + S_{sw}^2 + S_{air}^2)} / 1.73$		18.42



NORTH LAKE SQUARE OFFICE PARK  
1726 MONTREAL CIRCLE, SUITE 20  
TUCKER, GEORGIA 30084  
404-938-7710

*NUS is conducting  
well surveys for this  
site our 3<sup>rd</sup> year*

C-586-11-6-54

December 2, 1986

Mr. Richard D. Green  
Emergency and Remedial Response Branch  
Waste Management Division  
Environmental Protection Agency  
345 Courtland Street, N.E.  
Atlanta, Georgia 30365

Subject: Preliminary HRS Scores  
Georgia Pacific Corporation Savannah Site  
(GAD990741332)  
Savannah, Georgia  
TDD No. F4-8611-32

Dear Mr. Green:

FIT IV was tasked to compute a preliminary HRS score for the Georgia Pacific Corporation Site in Savannah, Georgia. Since 1946 this site has been used for the manufacture of hardwood and pine plywood, and prefinished wall paneling. The facility was first owned by the General Plywood Company, but was purchased by the Georgia Pacific Corporation in 1949 and is still owned and operated by them. In the early 1960's until the mid 1970's, Georgia Pacific operated a resin plant at the facility. A site inspection report prepared by the Georgia Environmental Protection Division (GA-EPD) stated that from 1959 until 1965 an estimated two to four drums per week of liquid/sludge waste solvents, paints, mineral spirits, etc. were generated at the facility. These wastes were poured onto the ground in two onsite disposal areas covering approximately three acres each. The GA-EPD estimated a waste quantity of 312 cubic yards from this information.

Samples collected by the GA-EPD in 1985 from the disposal areas indicated that the shallow groundwater contained elevated concentrations of arsenic, barium, chromium and lead. Samples of the surface soils also contained elevated concentrations of these metals, as well as toluene and methyl isobutyl ketone.

Within the study area, there are three aquifers: the surficial aquifer which extends from the land surface to approximately 55 feet below land surface (bls); the Miocene aquifer system which extends from approximately 55 feet bls to 229 feet bls; and the Floridan aquifer or principal artesian aquifer system which extends from approximately 212 feet bls to 382 feet bls. Only two of these aquifers were considered as the aquifer of concern in these scenarios. The middle aquifer is not used for water supplies. The surficial aquifer is thought to be utilized by approximately 50 residences within a three mile radius of the site. The distance to the nearest shallow well is not known. The deeper Floridan aquifer is used to supply the Garden City Water System. This system utilizes four deep production

Mr. Richard D. Green  
Environmental Protection Agency  
December 2, 1986 - Page 2

wells located within a three mile radius of the site and services approximately 7,000 people. Based on a house count from 7.5 min. USGS topographic maps, an additional 11,000 people reside within three miles of the site. It can be assumed that these residents also receive their drinking water supplies (either public or private) from the deep aquifer and thus, a total of approximately 18,000 people drink from the deep aquifer. The Georgia Pacific Savannah Plant has two deep wells onsite which are utilized for drinking. Therefore, the distance from the site to the nearest deep well is less than 2,000 feet.

The nearest body of surface water is the Pipe Maker's Canal, located approximately 3,000 feet downslope from the site. This canal is not used for drinking supplies, but is used for fishing downstream of the site. This canal flows through a freshwater wetland greater than five acres in size and approximately .5 miles northwest of the site. Based on this information, and the assumption that an observed release can not be documented, a surface water route score of 8.58 was obtained.

Three scenarios were evaluated based on the above surface water score and three different groundwater scores. The first scenario assumes the deep Floridan aquifer is the aquifer of concern. It is assumed that documentation of an observed release to this aquifer is unlikely and therefore, route characteristics are evaluated. The second and third scenarios are based on file data which document an observed release to the shallow aquifer. Since the distance to the nearest well drawing from this shallow aquifer is unknown at this time, the second scenario assumes a distance of less than 2,000 feet and the third scenario assumes this distance to be between 2,001 feet and one mile. These three scenarios and their respective scores are summarized below.

- Version 1: Route Characteristics of Deep aquifer  
Distance to nearest well is less than 2,000 feet  
Route Characteristics of surface water  
Total Migration Score: 17.75.
- Version 2: Observed Release to Shallow aquifer  
Assume: Distance to nearest well is less than 2,000 feet  
Route Characteristics of surface water  
Total Migration Score: 30.66.
- Version 3: Observed Release to Shallow aquifer  
Assume: Distance to nearest well is between 2,001 feet and one mile  
Route Characteristics of surface water  
Total Migration Score: 26.55.

Mr. Richard D. Green  
Environmental Protection Agency  
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Based upon review of the file material provided to FIT IV, only one plausible scenario (Version 2) results in a score above 28.5. This score is attainable if a shallow drinking water well can be located within 2,000 feet of the site and if at least 27 shallow wells (greater than 100 people) can be identified within a three mile radius. Computer printouts of the score sheets for each of the three scenarios presented are enclosed.

An additional potential hazard exists at this site via the direct contact mode. The site is only partially surrounded by a fence and a guard is only present during the day. A population of approximately 2,075 people reside within one mile of the site and a wetland and possible critical habitat area lie within .5 miles of the site. Based on these facts, a direct contact score of 62.50 is obtained.

If you have any questions regarding this preliminary HRS evaluation, please feel free to contact me at NUS Corporation.

Very truly yours,

*Pat Janni for Belinda Brock*

Belinda Brock  
Project Manager

  
Approval

BB/lis

Enclosures

cc: Camilla Warren  
Richard Ferrazzuolo, (w/o encl)

## HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

GEORGIA PACIFIC CORP SAVANNAH 1  
EPA SITE NUMBER GAD990741332  
SAVANNAH  
CHATHAM COUNTY, GA  
EPA REGION: 4

SCORE STATUS: IN PREPARATION

SCORED BY BELINDA BROCK  
OF NUS CORPORATION  
ON 11/06/86

DATE OF THIS REPORT: 11/19/86  
DATE OF LAST MODIFICATION: 11/19/86

GROUND WATER ROUTE SCORE :	29.49
SURFACE WATER ROUTE SCORE:	8.58
AIR ROUTE SCORE :	0.00
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MIGRATION SCORE :	17.75

## HRS GROUND WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
DEPTH TO WATER TABLE	212 FEET		
DEPTH TO BOTTOM OF WASTE	0 FEET		
DEPTH TO AQUIFER OF CONCERN	212 FEET	0	0
PRECIPITATION	48.0 INCHES		
EVAPORATION	45.0 INCHES		
NET PRECIPITATION	3.0 INCHES	1	1
PERMEABILITY	1.0X10 <sup>-6</sup> CM/SEC	1	1
PHYSICAL STATE		3	3
TOTAL ROUTE CHARACTERISTICS SCORE:			5
3. CONTAINMENT		3	3
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE: ARSENIC			18
WASTE QUANTITY CUBIC YDS	312		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	312 CU. YDS	5	5
TOTAL WASTE CHARACTERISTICS SCORE:			23
5. TARGETS			
GROUND WATER USE		3	9
DISTANCE TO NEAREST WELL AND	1000 FEET MATRIX VALUE	40	40
TOTAL POPULATION SERVED	18540 PERSONS		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	18540		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			49
GROUND WATER ROUTE SCORE (Sgw) = 29.49			

## HRS SURFACE WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
SITE LOCATED IN SURFACE WATER	NO		
SITE WITHIN CLOSED BASIN	NO		
FACILITY SLOPE	0.9 %		
INTERVENING SLOPE	1.0 %	0	0
24-HOUR RAINFALL	3.8 INCHES	3	3
DISTANCE TO DOWN-SLOPE WATER	3000 FEET	2	4
PHYSICAL STATE		3	3
TOTAL ROUTE CHARACTERISTICS SCORE:			10
3. CONTAINMENT		3	3
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE: ARSENIC			18
WASTE QUANTITY CUBIC YDS	312		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	312 CU. YDS	5	5
TOTAL WASTE CHARACTERISTICS SCORE:			23
5. TARGETS			
SURFACE WATER USE		2	6
DISTANCE TO SENSITIVE ENVIRONMENTS		1	2
COASTAL WETLANDS	NONE		
FRESH-WATER WETLANDS	2500 FEET		
CRITICAL HABITAT	NONE		
DISTANCE TO STATIC WATER	> 3 MILES		
DISTANCE TO WATER SUPPLY INTAKE	> 3 MILES		
AND MATRIX VALUE		0	0
TOTAL POPULATION SERVED	0		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			8
SURFACE WATER ROUTE SCORE (S <sub>sw</sub> ) = 8.58			

HRS AIR ROUTE SCORE

	<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1	OBSERVED RELEASE	NO	0	0

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**2. WASTE CHARACTERISTICS**

REACTIVITY:

MATRIX VALUE

INCOMPATIBILITY

TOXICITY

WASTE QUANTITY CUBIC YARDS  
DRUMS  
GALLONS  
TONS

TOTAL

TOTAL WASTE CHARACTERISTICS SCORE:

N/A

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**3. TARGETS**

POPULATION WITHIN 4-MILE RADIUS

0 to 0.25 mile

0 to 0.50 mile

0 to 1.0 mile

0 to 4.0 miles

DISTANCE TO SENSITIVE ENVIRONMENTS

COASTAL WETLANDS

FRESH-WATER WETLANDS

CRITICAL HABITAT

DISTANCE TO LAND USES

COMMERCIAL/INDUSTRIAL

PARK/FOREST/RESIDENTIAL

AGRICULTURAL LAND

PRIME FARMLAND

HISTORIC SITE WITHIN VIEW?

TOTAL TARGETS SCORE:

N/A

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AIR ROUTE SCORE (Sa) = 0.00



HAZARD RANKING SYSTEM SCORING CALCULATIONS  
FOR  
SITE: GEORGIA PACIFIC CORP SAVANNAH 1  
AS OF 11/19/86

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GROUND WATER ROUTE SCORE

ROUTE CHARACTERISTICS		5
CONTAINMENT	X	3
WASTE CHARACTERISTICS	X	23
TARGETS	X	49

$$= \frac{16905}{57,330} \times 100 = 29.49 = S_{gw}$$

SURFACE WATER ROUTE SCORE

ROUTE CHARACTERISTICS		10
CONTAINMENT	X	3
WASTE CHARACTERISTICS	X	23
TARGETS	X	8

$$= \frac{5520}{64,350} \times 100 = 8.58 = S_{sw}$$

AIR ROUTE SCORE

$$\text{OBSERVED RELEASE} \quad 0 / 35,100 \times 100 = 0.00 = S_{air}$$

SUMMARY OF MIGRATION SCORE CALCULATIONS

	<u>S</u>	<u>S<sup>2</sup></u>
GROUND WATER ROUTE SCORE (S <sub>gw</sub> )	29.49	869.66
SURFACE WATER ROUTE SCORE (S <sub>sw</sub> )	8.58	73.62
AIR ROUTE SCORE (S <sub>air</sub> )	0.00	0.00
S <sup>2</sup> <sub>gw</sub> + S <sup>2</sup> <sub>sw</sub> + S <sup>2</sup> <sub>air</sub>		943.28
√ (S <sup>2</sup> <sub>gw</sub> + S <sup>2</sup> <sub>sw</sub> + S <sup>2</sup> <sub>air</sub> )		30.71
S <sub>M</sub> = √ (S <sup>2</sup> <sub>gw</sub> + S <sup>2</sup> <sub>sw</sub> + S <sup>2</sup> <sub>air</sub> ) / 1.73		17.75

## HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

GEORGIA PACIFIC CORP SAVANNAH 4  
EPA SITE NUMBER GAD990741332  
SAVANNAH  
CHATHAM COUNTY, GA  
EPA REGION: 4

SCORE STATUS: IN PREPARATION

SCORED BY BELINDA BROCK  
OF NUS CORPORATION  
ON 11/06/86

DATE OF THIS REPORT: 11/20/86  
DATE OF LAST MODIFICATION: 11/20/86

GROUND WATER ROUTE SCORE	52.35
SURFACE WATER ROUTE SCORE	8.58
AIR ROUTE SCORE	0.00
-----	
MIGRATION SCORE	30.66

## HRS GROUND WATER ROUTE SCORE

CATEGORY/FACTOR		RAW DATA	ASN. VALUE	SCORE
1.	OBSERVED RELEASE	YES	45	45
2.	ROUTE CHARACTERISTICS			
	DEPTH TO WATER TABLE			
	DEPTH TO BOTTOM OF WASTE			
	DEPTH TO AQUIFER OF CONCERN			
	PRECIPITATION			
	EVAPORATION			
	NET PRECIPITATION			
	PERMEABILITY			
	PHYSICAL STATE			
	TOTAL ROUTE CHARACTERISTICS SCORE:			N/A
3.	CONTAINMENT			N/A
4.	WASTE CHARACTERISTICS			
	TOXICITY/PERSISTENCE: ARSENIC			18
	WASTE QUANTITY	CUBIC YDS	312	
		DRUMS	0	
		GALLONS	0	
		TONS	0	
	TOTAL	312 CU. YDS	5	5
	TOTAL WASTE CHARACTERISTICS SCORE:			23
5.	TARGETS			
	GROUND WATER USE		3	9
	DISTANCE TO NEAREST WELL	1000 FEET		
	AND	MATRIX VALUE	20	20
	TOTAL POPULATION SERVED	190 PERSONS		
	NUMBER OF HOUSES	50		
	NUMBER OF PERSONS	0		
	NUMBER OF CONNECTIONS	0		
	NUMBER OF IRRIGATED ACRES	0		
	TOTAL TARGETS SCORE:			29
GROUND WATER ROUTE SCORE (Sgw) = 52.35				

## HRS SURFACE WATER ROUTE SCORE

CATEGORY/FACTOR		RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE		NO	0	0
2. ROUTE CHARACTERISTICS				
SITE LOCATED IN SURFACE WATER		NO		
SITE WITHIN CLOSED BASIN		NO		
FACILITY SLOPE		0.9 %		
INTERVENING SLOPE		1.0 %	0	0
24-HOUR RAINFALL		3.8 INCHES	3	3
DISTANCE TO DOWN-SLOPE WATER		3000 FEET	2	4
PHYSICAL STATE		3		3
TOTAL ROUTE CHARACTERISTICS SCORE:				10
3. CONTAINMENT		3		3
4. WASTE CHARACTERISTICS				
TOXICITY/PERSISTENCE: ARSENIC				18
WASTE QUANTITY	CUBIC YDS	312		
	DRUMS	0		
	GALLONS	0		
	TONS	0		
	TOTAL	312 CU. YDS	5	5
TOTAL WASTE CHARACTERISTICS SCORE:				23
5. TARGETS				
SURFACE WATER USE			2	6
DISTANCE TO SENSITIVE ENVIRONMENTS			1	2
COASTAL WETLANDS		NONE		
FRESH-WATER WETLANDS		2500 FEET		
CRITICAL HABITAT		NONE		
DISTANCE TO STATIC WATER		> 3 MILES		
DISTANCE TO WATER SUPPLY INTAKE		> 3 MILES		
AND		MATRIX VALUE	0	0
TOTAL POPULATION SERVED		0		
NUMBER OF HOUSES		0		
NUMBER OF PERSONS		0		
NUMBER OF CONNECTIONS		0		
NUMBER OF IRRIGATED ACRES		0		
TOTAL TARGETS SCORE:				8
SURFACE WATER ROUTE SCORE (Ssw) = 8.58				

HRS AIR ROUTE SCORE

	<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1	OBSERVED RELEASE	NO	0	0

---

**2. WASTE CHARACTERISTICS**

REACTIVITY:

MATRIX VALUE

INCOMPATIBILITY

TOXICITY

WASTE QUANTITY CUBIC YARDS  
DRUMS  
GALLONS  
TONS

TOTAL

TOTAL WASTE CHARACTERISTICS SCORE:

N/A

---

**3. TARGETS**

POPULATION WITHIN 4-MILE RADIUS

0 to 0.25 mile  
0 to 0.50 mile  
0 to 1.0 mile  
0 to 4.0 miles

DISTANCE TO SENSITIVE ENVIRONMENTS

COASTAL WETLANDS  
FRESH-WATER WETLANDS  
CRITICAL HABITAT

DISTANCE TO LAND USES

COMMERCIAL/INDUSTRIAL  
PARK/FOREST/RESIDENTIAL  
AGRICULTURAL LAND  
PRIME FARMLAND  
HISTORIC SITE WITHIN VIEW?

TOTAL TARGETS SCORE:

N/A

---

AIR ROUTE SCORE (Sa) = 0 00

HAZARD RANKING SYSTEM SCORING CALCULATIONS  
FOR  
SITE: GEORGIA PACIFIC CORP SAVANNAH 4  
AS OF 11/20/86

PAGE 5

GROUND WATER ROUTE SCORE

OBSERVED RELEASE                      45  
WASTE CHARACTERISTICS    X    23  
TARGETS                                X    29

$$= \frac{30015}{57,330} \times 100 = 52.35 = S_{gw}$$

SURFACE WATER ROUTE SCORE

ROUTE CHARACTERISTICS            10  
CONTAINMENT                        X    3  
WASTE CHARACTERISTICS    X    23  
TARGETS                                X    8

$$= \frac{5520}{64,350} \times 100 = 8.58 = S_{sw}$$

AIR ROUTE SCORE

OBSERVED RELEASE                      0 / 35,100    X    100 = 0.00 =  $S_{air}$

SUMMARY OF MIGRATION SCORE CALCULATIONS

	<u>S</u>	<u>S<sup>2</sup></u>
GROUND WATER ROUTE SCORE ( $S_{gw}$ )	52.35	2740.52
SURFACE WATER ROUTE SCORE ( $S_{sw}$ )	8.58	73.62
AIR ROUTE SCORE ( $S_{air}$ )	0.00	0.00
$S_{gw}^2 + S_{sw}^2 + S_{air}^2$		2814.14
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_{air}^2}$		53.05
$S_M = \sqrt{S_{gw}^2 + S_{sw}^2 + S_{air}^2} / 1.73$		30.66

## HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

GEORGIA PACIFIC CORP SAVANNAH 3  
EPA SITE NUMBER GAD990741332  
SAVANNAH  
CHATHAM COUNTY, GA  
EPA REGION. 4

SCORE STATUS: IN PREPARATION

SCORED BY BELINDA BROCK  
OF NUS CORPORATION  
ON 11/06/86

DATE OF THIS REPORT: 11/21/86  
DATE OF LAST MODIFICATION: 11/21/86

GROUND WATER ROUTE SCORE :	45.13
SURFACE WATER ROUTE SCORE:	8.58
AIR ROUTE SCORE :	0.00
-----	
MIGRATION SCORE :	26.55

## HRS GROUND WATER ROUTE SCORE

CATEGORY/FACTOR		RAW DATA	ASN. VALUE	SCORE
1.	OBSERVED RELEASE	YES	45	45
2.	ROUTE CHARACTERISTICS			
	DEPTH TO WATER TABLE			
	DEPTH TO BOTTOM OF WASTE			
	DEPTH TO AQUIFER OF CONCERN			
	PRECIPITATION			
	EVAPORATION			
	NET PRECIPITATION			
	PERMEABILITY			
	PHYSICAL STATE			
	TOTAL ROUTE CHARACTERISTICS SCORE:			N/A
3.	CONTAINMENT			N/A
4.	WASTE CHARACTERISTICS			
	TOXICITY/PERSISTENCE: ARSENIC			18
	WASTE QUANTITY	CUBIC YDS	312	
		DRUMS	0	
		GALLONS	0	
		TONS	0	
	TOTAL	312 CU. YDS	5	5
	TOTAL WASTE CHARACTERISTICS SCORE:			23
5.	TARGETS			
	GROUND WATER USE		3	9
	DISTANCE TO NEAREST WELL	2500 FEET		
	AND	MATRIX VALUE	16	16
	TOTAL POPULATION SERVED	190 PERSONS		
	NUMBER OF HOUSES	50		
	NUMBER OF PERSONS	0		
	NUMBER OF CONNECTIONS	0		
	NUMBER OF IRRIGATED ACRES	0		
	TOTAL TARGETS SCORE:			25

GROUND WATER ROUTE SCORE (Sgw) = 45.13



## HRS SURFACE WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
SITE LOCATED IN SURFACE WATER	NO		
SITE WITHIN CLOSED BASIN	NO		
FACILITY SLOPE	0.9 %		
INTERVENING SLOPE	1.0 %	0	0
24-HOUR RAINFALL	3.8 INCHES	3	3
DISTANCE TO DOWN-SLOPE WATER	3000 FEET	2	4
PHYSICAL STATE	3		3
TOTAL ROUTE CHARACTERISTICS SCORE:			10
3. CONTAINMENT	3		3
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE: ARSENIC			18
WASTE QUANTITY CUBIC YDS	312		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	312 CU. YDS	5	5
TOTAL WASTE CHARACTERISTICS SCORE:			23
5. TARGETS			
SURFACE WATER USE		2	6
DISTANCE TO SENSITIVE ENVIRONMENTS		1	2
COASTAL WETLANDS	NONE		
FRESH-WATER WETLANDS	2500 FEET		
CRITICAL HABITAT	NONE		
DISTANCE TO STATIC WATER	> 3 MILES		
DISTANCE TO WATER SUPPLY INTAKE	> 3 MILES		
AND MATRIX VALUE		0	0
TOTAL POPULATION SERVED	0		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			8
SURFACE WATER ROUTE SCORE (S <sub>SW</sub> ) = 8.58			

HRS AIR ROUTE SCORE

<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1. <u>OBSERVED RELEASE</u>	<u>NO</u>	<u>0</u>	<u>0</u>

---

2. WASTE CHARACTERISTICS

REACTIVITY:

MATRIX VALUE

INCOMPATIBILITY

TOXICITY

WASTE QUANTITY CUBIC YARDS  
DRUMS  
GALLONS  
TONS

TOTAL

TOTAL WASTE CHARACTERISTICS SCORE:

N/A

---

3. TARGETS

POPULATION WITHIN 4-MILE RADIUS

0 to 0.25 mile

0 to 0.50 mile

0 to 1.0 mile

0 to 4.0 miles

DISTANCE TO SENSITIVE ENVIRONMENTS

COASTAL WETLANDS

FRESH-WATER WETLANDS

CRITICAL HABITAT

DISTANCE TO LAND USES

COMMERCIAL/INDUSTRIAL

PARK/FOREST/RESIDENTIAL

AGRICULTURAL LAND

PRIME FARMLAND

HISTORIC SITE WITHIN VIEW?

TOTAL TARGETS SCORE:

N/A

---

AIR ROUTE SCORE (Sa) = 0.00

# HAZARD RANKING SYSTEM SCORING CALCULATIONS FOR

PAGE 5

SITE: GEORGIA PACIFIC CORP SAVANNAH 3  
AS OF 11/21/86

## GROUND WATER ROUTE SCORE

OBSERVED RELEASE 45  
WASTE CHARACTERISTICS X 23  
TARGETS X 25

$$= \frac{25875}{57,330} \times 100 = 45.13 = S_{gw}$$

## SURFACE WATER ROUTE SCORE

ROUTE CHARACTERISTICS 10  
CONTAINMENT X 3  
WASTE CHARACTERISTICS X 23  
TARGETS X 8

$$= \frac{5520}{64,350} \times 100 = 8.58 = S_{sw}$$

## AIR ROUTE SCORE

OBSERVED RELEASE 0 / 35,100 X 100 = 0.00 = S<sub>air</sub>

## SUMMARY OF MIGRATION SCORE CALCULATIONS

	<u>S</u>	<u>S<sup>2</sup></u>
GROUND WATER ROUTE SCORE (S <sub>gw</sub> )	45.13	2036.72
SURFACE WATER ROUTE SCORE (S <sub>sw</sub> )	8.58	73.62
AIR ROUTE SCORE (S <sub>air</sub> )	0.00	0.00
S <sup>2</sup> <sub>gw</sub> + S <sup>2</sup> <sub>sw</sub> + S <sup>2</sup> <sub>air</sub>		2110.34
√ (S <sup>2</sup> <sub>gw</sub> + S <sup>2</sup> <sub>sw</sub> + S <sup>2</sup> <sub>air</sub> )		45.94
S <sub>M</sub> = √ (S <sup>2</sup> <sub>gw</sub> + S <sup>2</sup> <sub>sw</sub> + S <sup>2</sup> <sub>air</sub> ) / 1.73		26.55

**SITE INSPECTION REPORT**  
**GEORGIA PACIFIC CORPORATION SAVANNAH**  
**GAD990741332**

**Charles Stephen Walker**  
**Georgia Environmental Protection Division**  
**August 1986**

Reviewed By: Mike Allred

Date: 9-11-86

GEORGIA PACIFIC CORPORATION SAVANNAH

SITE INVESTIGATION REPORT

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**GEORGIA PACIFIC CORPORATION SAVANNAH**

**SITE INVESTIGATION REPORT**

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## 1.0 EXECUTIVE SUMMARY

The Georgia Pacific Corporation Savannah site consists of two 3 acre disposal areas that received miscellaneous solid wastes from the adjacent Georgia Pacific plywood/wall paneling plant. A long time employee of the facility has stated that from 1959 until 1965, about 2 - 4 drums of liquid/sludge waste solvents, paints, mineral spirits, etc. were generated at the facility each week. These wastes were poured out onto the ground at the subject disposal areas. An approximate waste volume of 312 cubic yards has been calculated from this information. The wastes in disposal areas 1 & 2 received little, if any, soil cover.

On November 21, 1985, personnel from the EPD obtained soil and shallow ground water samples from the two disposal areas on-site. The subsequent laboratory analyses indicated that shallow ground water in area 2 contained concentrations of total chromium that were significantly greater than background concentrations. A soil sample obtained from around some crushed drums in area 1 contained high concentrations of toluene and methyl isobutyl ketone.

The Georgia Pacific Corporation subsequently began efforts to define the impact of the contaminants to the soil and shallow ground water on-site. The Georgia Pacific Corporation obtained a total of 42 soil samples from the two disposal areas. A total of two soil borings have been completed at the site to determine the depth and extent of the shallow aquifer prior to installation of monitoring wells. The monitoring wells are scheduled for installation during late August

1966, and they will be used to monitor up and downgradient locations of the shallow aquifer around each disposal area.



## **2.0 BACKGROUND**

### **2.1 Location**

The Georgia Pacific Savannah site is located immediately north of the Old Louisville Road approximately 2 miles southwest of the township of Garden City and about 5 miles west of the Savannah Municipal Courthouse (Appendix A, Figure 1). The mailing address for the facility is P. O. Box 367, Old Louisville Road, Savannah, Georgia 31498.

### **2.2 Site Layout**

The Georgia Pacific facility is comprised of approximately 207 acres, approximately 25 of which are occupied by a wall panelling and plywood manufacturing plant and associated buildings (Appendix A, Figure 2). Two waste disposal areas (collectively considered to be the site) exist on the Georgia Pacific property. Disposal Areas 1 & 2 (See Appendix A, Figure 2) occupy approximately 3 acres each and various types of solid waste (various metal scrap, pallets and a few crushed drums) are partially visible on the surface. Both disposal areas are moderately vegetated with bushes, and in some places, with young willow trees.

The remaining 176± acres are composed of waste water treatment ponds, an abandoned bark disposal area and vacant/wooded land.

Access to the site is restricted. Portions of the Georgia Pacific property are fenced. A security guard is stationed along the road leading to the facility.

### 2.3 Ownership History

In 1946, General Plywood Corporation constructed a plywood manufacturing plant on the subject property. This plywood operation continued until 1949 when the plant and property were purchased by the Georgia Pacific Corporation. Georgia Pacific still owns and operates the facility.

### 2.4 Site Use History

From 1946 until 1949, General Plywood operated a plywood manufacturing facility at the subject property. In 1949, the property and accompanying facility were purchased by the Georgia Pacific Corporation. Georgia Pacific then began manufacturing plywood made from hardwood trees. In the early 1960's, Georgia Pacific also began to operate a resin plant at the facility. In mid-1970, this resin facility was relocated to Port Wentworth, Georgia. From 1965 until 1979, Georgia Pacific operated a pine plywood manufacturing operation at the facility. Since 1957, the facility has manufactured pre-finished wall paneling. Plywood made from hardwood is also still manufactured at the facility (Appendix D, Attachments 1 and 2).

### 2.5 Permit and Regulatory History

The subject facility has the following permits:

<u>Type</u>	<u>Number</u>	<u>Information</u>
Ground Water	025-0019	for withdrawal of 100,000 gpd from 2 wells drawing from the Principal Artesian Aquifer only. Issued 1975 and is continuing (renewed semi-annually).
NPDES	GA 0003051	for sanitary wastewater, storm water, boiler blow down, cooling water and

<u>Type</u>	<u>Number</u>	<u>Information</u>
		softener backwash. Discharge to Pipe Maker's Canal with a grab sample at the outfall every 2 months. Sample is tested for BOD, suspended solids and pH (pH should be >6.0 or <9.0). Term - 6/15/84 5/31/89.
Air	2406-025-8221-0	for baghouse sander dust, glues and coatings in boiler washdown. Limit of 0.27 lbs/10 <sup>6</sup> BTU.

## 2.6 Remedial Actions to Date

No remedial actions have taken place at this site; however, a total of 22 "observation" wells were placed around disposal areas 1 & 2 sometime prior to 11/21/85. The wells were constructed of 2 inch PVC pipe and were placed in order to deduce ground water elevations and flow directions at both disposal areas.

## 2.7 Summary Trip Report

On November 21, 1985, Steve Walker and Johnny Morgan (the sampling team) of the Georgia EPD arrived on site at 08:20 hours to inspect and obtain samples from the 2 disposal areas. The sampling team met briefly with the following persons:

Mr. Gerald Tice, Chief Environmental Engineer  
 Tom Stevens, Environmental Engineer  
 Mr. Lawrence Otwell, Environmental Engineer  
 Eastern Wood Products Manufacturing Division  
 Georgia Pacific Corporation

Ms. Janette M. Davis, Chief Chemist  
 Mr. Jim Snyder, Technician  
 Savannah Laboratory and Environmental Services, Inc.

Mr. Stevens explained that two days previous to the visit by the EPD, the Georgia Pacific Timber Products Division was clearing and grubbing an area which included Area 1. Mr. Stevens explained that several rusty drums of what appeared to be solvents and paints were uncovered by heavy equipment. The meeting ended and the sampling team was escorted by the Georgia Pacific personnel and a sampling technician from Savannah Labs on a reconnaissance of Area 1. The area appeared to be surrounded with 2 inch, PVC monitoring wells. Mr. Stevens stated that the wells were "observation" wells which were placed to discern shallow ground water flow direction. Mr. Stevens stated that he had not told EPD of the wells because the EPD did not specifically ask if the wells were present.

All personnel returned to the vehicles and obtained sampling materials. A background soil sample was obtained prior to sampling an observation well which was adjacent to the exhumed drums.

The sampling team then returned to the drum area and obtained a composite surface soil sample from the area immediately around the drums. All samples were split with the Georgia Pacific Corporation. The sampling team then returned to the vehicles and proceeded to Area 2.

Area 2 was covered with bushes and small trees and like Area 1, it was also surrounded by observation wells. A composite surface soil sample was obtained from the area and a water sample was obtained from an observation well. The samples from Area 2 were also split with Georgia Pacific.

Mr. Stevens and Mr. Snyder returned to Area 2 to get some waste samples from the drums. The sampling team returned to the main plant office with Mr. Tice and Mr. Otwell, where Mr. Tice pointed out the location of 2 deep wells on site.

The sampling team was off-site by 13:00 hours.

The team conducted a well survey of houses around the site on the Old Louisville Road and in the Woodlawn Terrace/Sharon Park Communities. In approximately 20% of the homes visited, residents were home. Most persons interviewed stated that they had a deep (several hundred feet) well. Several residents had no idea of the depth of their well. No shallow wells were found during the survey. All homes within one mile to the south, east and west of the site are on well water. Most homes have a private well, although community wells serving several houses each are in the Woodlawn Terrace/Sharon Park areas.

### **3.0 ENVIRONMENTAL SETTING**

#### **3.1 Topography**

The topography of the Georgia Pacific property is essentially flat with a slope of approximately 1 or 2% toward the northwest (Appendix A, Figure 1).

#### **3.2 Surface Waters**

Surface run-off from the Georgia Pacific property enters Pipemaker's Canal about 3,000 feet northwest of the site. Pipe Maker's Canal enters the Savannah River about 3 miles (by air) northeast of the site (Appendix A, Figure 3). The Savannah River enters the Atlantic Ocean approximately twelve air miles east of the site. Tidal influence occurs along Pipe Maker's Canal at the Georgia Pacific property.

#### **3.3 Geology and Soils**

The site is underlain at depth by metamorphic and igneous crystalline "basement" rocks which are overlain by clastics and carbonates of Cretaceous to Pleistocene age. Important rock units in ascending order are the Ocala Group, the Suwanee Limestone, the Hawthorne Group and overlying sediments.

The Ocala Group and overlying Suwanee Limestone are composed of permeable carbonates which are collectively several hundred feet thick. The Suwanee Limestone is found at a depth of approximately 250 feet at the Georgia Pacific site. The overlying Hawthorne Group is composed chiefly of clays and silts and is roughly 200-250 feet thick in the site area. The Hawthorne is overlain

by unconsolidated sands, silts and clays approximately 35-50 feet thick (Appendix D, Attachments 3, 4 & 5).

From observations made on-site on 11/21/85, the surficial soil appeared to be sandy and quite permeable. At a depth of 1 foot, the soil appeared to be much less permeable and more clay-rich.

### 3.4 Ground Water

In the general site area, potable ground water occurs in the Ocala Group and Suwannee Limestone (collectively known in Georgia as the Principal Artesian Aquifer), in sandy zones within the Hawthorne Group and in sandy zones and lenses in the surficial, unconsolidated sediments (1).

The Principal Artesian Aquifer is by far the most widely used aquifer in Chatham County and the general site area. This prolific aquifer commonly yields 1 to 5 thousand gpm.

The Hawthorne Group contains clays and sandy clays with lens shaped bodies of sand, gravel and thin carbonate layers. This geologic unit acts as a confining layer above the Principal Artesian Aquifer. Nevertheless, these highly variable permeable layers and lenses within the Hawthorne Group can provide over 100 gpm to wells that have been properly developed.

The more permeable surficial sediments overlying the Hawthorne Group may provide potable water in amounts ranging from 25 to 200 gpm.

Water quality in all three aquifers is generally good (2).

### 3.5 Climate and Meteorology

Savannah and the general site area generally have hot, humid summers and cold to warm winters. The climate of the site area is influenced by continental air masses moving from the northwest and by ocean air masses from the Atlantic and Gulf of Mexico. The average annual rainfall for the site area is 49-52 inches (3).

### 3.6 Land Use

Land use within Chatham County is as follows - 1979 estimates (3):

<u>Use</u>	<u>Acres</u>	<u>Percent</u>
forest	85,297	46.2
urban	85,000	46.0
pasture	6,968	4.0
cropland	5,229	2.8
rural roads	2,156	1.0
	<u>184,650</u>	<u>100.0</u>

The two disposal areas which comprise the site are no longer in use.

### 3.7 Population Distribution

Land within one mile, east, north and west of the site is sparsely populated. The Woodlawn Terrace and Sharon Park Subdivisions are located 1/2 mile south and 1 mile southeast of the site respectively.

Population estimates were made for radii of one, two and three miles from the disposal areas. These estimates were based on house/building counts from USGS 7.5 Minute Topographic maps, Port Wentworth and Garden City Quadrangles.



The topographic maps were dated 1971 and 1980 respectively. Houses/buildings were counted and assigned a value of 3.8 persons per house/building. The following population data resulted from these efforts:

<u>Distance from Site</u>	<u>No. Buildings/Houses</u>	<u>No. Persons</u>
1 mile	$467 \times 3.8 + 300^*$	= 2,075
2 miles	$2,240 \times 3.8 + 300^*$	= 8,812
3 miles	$4,800 \times 3.8 + 300^*$	= 18,540

\*Note - the 300 employees of the Georgia Pacific facility are added to the total number of persons. The buildings of the actual Georgia Pacific facility were not counted.

### 3.8 Water Supply

Water is supplied to the Georgia Pacific facility from 2 deep wells located adjacent to the plant. These wells are 568 and 274 deep. The facility is permitted by the EPD to withdraw 100,000 gallons per day from both wells combined.

Numerous private wells were observed along Old Louisville Road during a well survey conducted by EPD personnel on 11/21/86. Also, five residences immediately south of disposal area 1 (Appendix A, Figure 1) possess private wells. Depths of most of these wells are unknown as few of the residents were home at the time of the well survey. Those residents that were home stated that they had a "deep" (depth unspecified) well. When asked further about the depth of these wells, many residents would say "several hundred feet". The township of Garden City is located 1.5 miles northeast of the site. A total of three municipal wells supply Garden City with drinking water. These wells all draw from the Principal Artesian Aquifer and the closest active municipal well to the site is shown in Appendix A, Figure 1. The Woodlawn

Terrace and Sharon Park subdivisions which are south of the site, are supplied with drinking water by the Garden City Municipal Water System. Mr. Paul Clawson, a consulting geologist, was contacted and he indicated that he was aware of 3 private shallow wells (<25 feet deep) within 3 miles of the site area that are used for drinking. He stated that he could not remember the exact locations of the wells or the names of the residents who use the wells.

### **3.9 Critical Environments**

Marshlands greater than 5 acres in size exist along Pipe Maker's Canal about 1/2 mile northwest of the site and along an unnamed drainage canal about 2 miles south of the site. These marshlands are believed to be influenced to some extent by the local tidal fluctuations (Appendix D, Attachment 6). The marshlands are assumed to consist of mostly fresh water although they may contain some sea water during periods of very high tides.

The Humpback Whale and the Manatee have both been observed along Coastal Chatham County. However, both are thought to only migrate through the coastal portion of Chatham County (4). In addition, Chatham County is habitat for the Bald Eagle, the Red Cockaded Woodpecker, the Brown Pelican, Kirtland's Warbler and the American Alligator.

## **4.0 WASTE TYPES AND QUANTITIES**

### **4.1 Waste Types**

Lacquers, paints and unspecified solvents were used by the Georgia Pacific facility and were allegedly dumped in the two disposal areas from 1959 to 1963. These wastes were alleged to have been a liquid or sludge when disposed (Appendix D, Attachment 7 & 8).

### **4.2 Waste Disposal Methods and Locations**

Hazardous materials were reportedly poured out onto the ground and allowed to "percolate through". This waste disposal occurred in two areas on the Georgia Pacific property. Each area is approximately three acres in size (Appendix A, Figure 2). Observations made at the disposal areas on 11/21/85 by EPD personnel indicated that materials disposed of in these areas consisted of various wood and metal scraps and empty and almost empty fifty-five gallon drums which appear to have been crushed. Quantities of bark, wiring, and miscellaneous solid wastes were also disposed of in these two areas. Waste materials were apparently dumped out onto the surface. Boring information gathered by Georgia Pacific during Phase I of their site investigation, indicated that fill material at the site may extend to a depth of 2.5 feet below the surface.

### **4.3 Waste Quantities**

Mr. Leon Stephenson, long time employee and present Plant Superintendent at the Georgia Pacific facility, indicated in a phone conversation with Steve

Walker of the Georgia EPD that from 1959-1965, two to four drums of liquid/sludge wastes were generated at the plant each week. He stated that these wastes were simply poured out onto the surface of the ground and that no drums were ever buried (Appendix D, Attachment 7). Crushed drums containing solvent residues were observed by EPD personnel in area 1 on 11/21/85. An approximation of waste quantity may be obtained by assuming 4 drums of waste per week times 52 weeks per year. This yields 208 drums (52 cubic yards) of waste each year for six years. Total liquid/sludge waste volume is therefore estimated to be approximately 1,248 drums or 312 cubic yards.

An unknown quantity of miscellaneous solid waste was also disposed of in areas 1 and 2.

## 5.0 LABORATORY DATA

### 5.1 Summary

Sampling at the site identified the following substances in the indicated amounts. The only substances listed are ones that do not naturally occur or are hazardous metals with total values three times above the laboratory detection limit and ten times above the background value for the metal.

Analysis by EPD lab and by contract lab for Georgia Pacific Corporation:

<u>SUBSTANCE</u>	<u>SAMPLE TYPE</u>	<u>AREA 1 OR 2</u>	<u>AMOUNT</u>
toluene	soil	1	32,000 mg/kg
methyl isobutyl ketone	soil	1	26,000 mg/kg
bis (2 ethylhexyl) phthalate	soil	1	39 mg/kg
chromium	groundwater	2	145 µg/L (total)
arsenic	soil	1 & 2	1.4 - 1800 mg/L (total)
lead	soil	1 & 2	4.3 - 1300 mg/L (total)

### 5.2 Quality Assurance Review

All sampling and subsequent analysis were conducted in accordance with procedures set forth in EPA publication SW 846 "Test Methods for Evaluation of Solid Waste" (5).

## 6.0 TOXICOLOGICAL/CHEMICAL CHARACTERISTICS

The substances identified in samples collected at the site have the following properties (6):

arsenic - a human carcinogen; lowest oral dose producing toxic effects in a man is 7,856 mg/kg/55 years; OSHA standard in air is a time weighted average of 500  $\mu\text{g}/\text{m}^3$ .

chromium - suspected animal carcinogen; OSHA standard in air is a time weighted average of 1  $\text{mg}/\text{m}^3$ ; toxicity varies with the valence state (hexavalent is thought to be more toxic than the trivalent state) and the compound.

bis (2 ethylhexyl) phthalate - is possible human carcinogen; oral rat LD<sub>50</sub> - 31 grams/kg; lowest oral dose which has produced toxic effects in a man is 143 mg/kg; OSHA standard in air is a time weighted average of 5  $\text{mg}/\text{m}^3$ .

lead - lowest oral dose producing toxic effects to the central nervous system in a human (woman) is 450 mg/kg/6 years; OSHA standard in air is a time weighted average of 200  $\mu\text{g}/\text{m}^3$ . Especially damaging to the lungs and kidneys.

methyl isobutyl ketone - oral rat LD<sub>50</sub> - 2080 mg/kg; lowest concentration in air producing a toxic effect in a human is 200 ppm; OSHA standard in air is a time weighted average of 100 ppm.

toluene - oral rat LD<sub>50</sub> - 5,000 mg/kg; the lowest concentration producing a toxic effect on the human central nervous system is 200 ppm (by inhalation); OSHA standard in air is a time weighted average of 200 ppm (with no time period specified).

CSW/mcw004

## APPENDIX A

## Appendix A

Figure 1: Site Location Map Georgia Pacific Corp. Savannah  
GAD990741332

Appendix A

Lat. 32° 05' 56"  
Long. 81° 10' 48"

MAKERS  
Sewage Disposal  
Trailer Park  
FIELD  
Sewage Disposal  
SITE  
CANAL  
Industrial Waste Pond  
area 2  
area 1  
drinking water wells  
depths, unknown  
WOODLAWN TERRACE  
SEABOARD  
SANDPIT  
COAST  
LOUISVILLE  
Hamer  
Dean Forest Ch  
GARDEN CITY QUADRANGLE  
GEORGIA-CHATHAM CO. 1980  
7.5 MINUTE SERIES ORTHOPHOTOMAP (TOPOGRAPHIC)  
SCALE 1:24 000  
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET  
1 5 0 18 1 KILOMETER  
CONTOUR INTERVAL 1.5 METERS

MAKERS  
Sewage Disposal  
Trailer Park  
FIELD  
Sewage Disposal  
SITE  
CANAL  
Industrial Waste Pond  
area 2  
area 1  
drinking water wells  
depths, unknown  
WOODLAWN TERRACE  
SEABOARD  
SANDPIT  
COAST  
LOUISVILLE  
Hamer  
Dean Forest Ch  
GARDEN CITY QUADRANGLE  
GEORGIA-CHATHAM CO. 1980  
7.5 MINUTE SERIES ORTHOPHOTOMAP (TOPOGRAPHIC)  
SCALE 1:24 000  
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET  
1 5 0 18 1 KILOMETER  
CONTOUR INTERVAL 1.5 METERS

7.5 MINUTE SERIES ORTHOPHOTOMAP (TOPOGRAPHIC)

SCALE 1:24 000

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 18 1 KILOMETER

CONTOUR INTERVAL 1.5 METERS



Figure 2: Site Sketch Map - Georgia Pacific Corp. Savannah

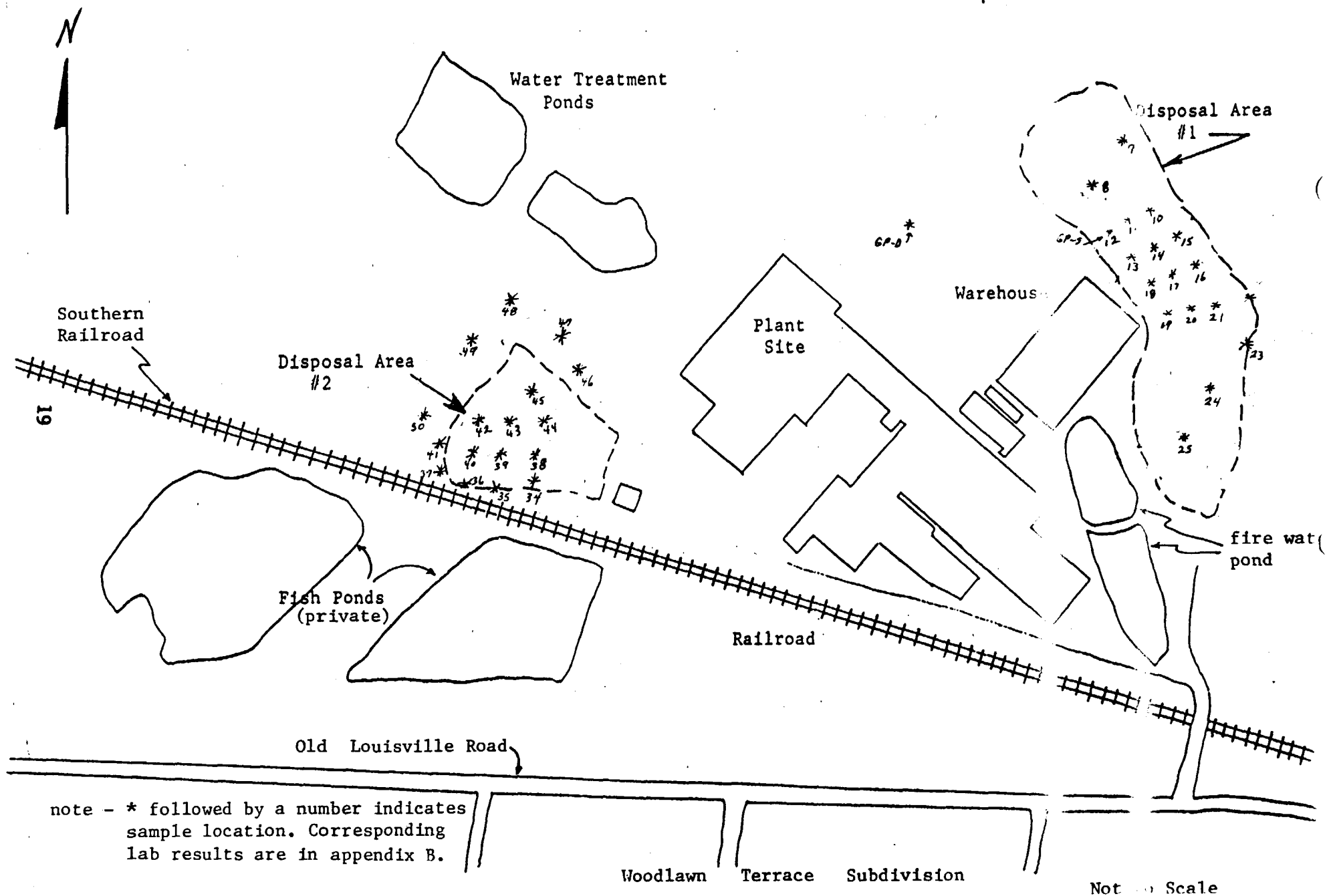


Figure 3: Map Showing 3 and 5 Mile Radii of the Georgia Pacific Plant.



## **APPENDIX B**

SAMPLE  
DATE:

4/11/86

PROJECT:

Ga. Pacific - Savannah

COLLECTOR:

Walker

DATE

REC'D

4-14-86

LABEL

GP-5

TIDE

REC'D

1030

BY:

D. Reed

DEL

BY:

S. Walker

Harold Sanford

LABORATORY MANAGER

Soil

- duplicate  
from sample  
station #11

DATE: 5-29-86

PARAMETERS

LAB NO.

HW 1870

Volatile Organic Compounds

mg/kg

<1

pH

(10%)

5.6

Total

Ag

mg/kg

<5

"

As

"

<15

"

Ba

"

1800

"

Cd

"

<5

"

Cr

"

64

"

Pb

"

190

"

Se

"

<25

EP

Ag

ug/L

<20

"

As

"

<60

"

Ba

"

210

"

Cd

"

<20

"

Cr

"

<20

"

Pb

"

<50

"

Se

"

<100

Bis (2 Ethyl Hexyl) Phthalate

mg/kg dry

39

RECEIVED

REMARKS:



SAMPLE  
DATE:

11/21/85

PROJECT:

Georgia Pacific - Savannah

COLLECTOR:

Walker

DATE  
REC'D  
TIME

11-22-85

EW LOG NO.

LABEL

1633	1635				
GPW-1	GPW-2				
ground water	ground water				
shallow well	shallow well				
area 1	area 2				

REC'D

BY:

N Sanford

DEL

BY:

Walker

Harold Sanford  
LABORATORY MANAGER

DATE: 12-11-85

PARAMETERS

LAB NO.

Hw 1633

Hw 1635

Volatile organic compounds 47/1

<1

<1

TOTAL Ag 49/L

<20

<20

" As "

50

450

" Ba "

70

525

" Cd "

<10

<10

" Cr "

<10

145

" Pb "

<20

145

" Se "

<50

<50

DISSOLVED Ag 49/L

<20

<20

" As "

<25

<25

" Ba "

45

<10

" Cd "

<10

<10

" Cr "

<10

<10

" Pb "

<20

<20

" Se "

<50

<50

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DEC 13 1985

REMARKS:

# GEORGIA ENVIRONMENTAL PROTECTION DIVISION

## LABORATORY REPORT

Appendix B

p.4 of 16

SAMPLE

DATE: 11/21/85

PROJECT:

Georgia Pacific - Savannah

COLLECTOR:

Walker

DATE

REC'D 11-22-85

LABEL

TIME

REC'D 0550

REC'D

BY: H. Sanford

DEL

BY: Walker

Harold Sanford  
LABORATORY MANAGER

HW LOG NO.

1632

1634

1636

GP-1

GP-2

GP-3

Soil

Soil

Soil

background

composite area 1

composite area 2

DATE: 12-11-85

PARAMETERS

LAB NO.

HW 1632

HW 1634

HW 1636

Toluene

mg/kg

<1

32,000

<1

Methyl Isobutyl Ketone

"

<1

26,000

<1

TOTAL

Ag

49/L

<20

<20

<100

"

As

"

<30

<30

<150

"

Ba

"

80

50

1820

"

Cd

"

<10

<10

<50

"

Cr

"

<10

<10

<50

"

Pb

"

<10

<20

<100

"

Se

"

<50

<50

<250

RECEIVED

DEC 13 1985

REMARKS:



James W. Andrews, Ph.D.  
President  
Janette M. Davis  
Chief Chemist, V.P.

**SAVANNAH LABORATORIES**  
**AND ENVIRONMENTAL SERVICES, INC.**  
P.O. Box 13842 • Savannah, Ga. 31416-0842  
912/354-7858

- LOG NO: 85-0772

Reported: 20 DEC 85

Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , WATER SAMPLES		
0772-1	#7 upstream near drum site of Area #1		
0772-2	Well #5 from drum site of Area #2		
PARAMETER		0772-1	0772-2
Arsenic, mg/l		0.03	<0.01
Barium, mg/l		0.085	0.068
Cadmium, mg/l		<0.01	<0.01
Chromium, mg/l		<0.05	<0.05
Lead, mg/l		0.03	<0.01
Selenium, mg/l		<0.05	<0.05
Silver, mg/l		<0.05	<0.05
Arsenic (Dissolved), mg/l		<0.01	<0.01
Barium (Dissolved), mg/l		<0.05	<0.05
Cadmium (Dissolved), mg/l		<0.01	<0.01
Chromium (Dissolved), mg/l		<0.05	<0.05
Lead (Dissolved), mg/l		<0.01	<0.01
Selenium (Dissolved), mg/l		<0.05	<0.05
Silver (Dissolved), mg/l		<0.05	<0.05

*Note - Samples were splits of EPA samples*





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P.O. Box 13842 • Savannah, Ga. 31416-0842  
912/354-7858

James W. Andrews, Ph.D.  
President  
Janette M. Davis  
Chief Chemist, VP

LOG NO: 85-0772

Received: 21 NOV 85  
Reported: 20 DEC 85

Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES			
0772-3	GP-1 Background Soil			
0772-4	GP-2 soil cmpos/drum site/MW#7/Area #1			
0772-5	GP-3 soil cmpos/drum site/MW#5/Area #2			
PARAMETER		0772-3	0772-4	0772-5
Arsenic, mg/kg		88	1800	550
Barium, mg/kg		88	3.9	4.4
Cadmium, mg/kg		<0.059	1.1	0.59
Chromium, mg/kg		7.1	3.6	41
Lead, mg/kg		12	59	80
Selenium, mg/kg		<29	<29	<33
Silver, mg/kg		<2.9	<2.9	<3.3

*Note - Samples were splits of EPO soil/samples*

James W. Andrews, Ph.D.  
PresidentJanette M. Davis  
Vice-President**SAVANNAH LABORATORIES**  
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(912) 354-7858

LOG NO: 86-0821

Received: 11 APR 86

Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

## REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES				
0821-1	Site #1 - 10 - Savannah Plant <i>at ca 1</i>				
0821-2	Site #1 - 11 - Savannah Plant <i>"</i>				
0821-3	Site #1 - 12 - Savannah Plant <i>"</i>				
0821-4	Site #1 - 13 - Savannah Plant <i>"</i>				
0821-5	Site #1 - 14 - Savannah Plant <i>"</i>				
PARAMETER	0821-1	0821-2	0821-3	0821-4	0821-5
Arsenic, mg/kg	7.4	8.1	15	14	6.3
Barium, mg/kg	130	550	830	600	82
Cadmium, mg/kg	0.10	0.16	0.10	0.38	0.06
Chromium, mg/kg	<1.3	6.3	13	62	16
Lead, mg/kg	15	31	26	76	23
Mercury, mg/kg	<0.02	0.10	0.10	0.40	0.10
Selenium, mg/kg	<1	<2	<1	<2	<1
Silver, mg/kg	<1	<2	<1	<2	<1

Methods: SW846

James W. Andrews, Ph.D.  
President

Janette M. Davis  
Vice-President

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LOG NO: 86-0821

Received: 11 APR 86

Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES				
0821-6	Site #1 - 15 - Savannah Plant area 1				
0821-7	Site #1 - 16 - Savannah Plant "				
0821-8	Site #1 - 17 - Savannah Plant "				
0821-9	Site #1 - 18 - Savannah Plant "				
0821-10	Site #1 - 19 - Savannah Plant "				
PARAMETER	0821-6	0821-7	0821-8	0821-9	0821-10
Arsenic, mg/kg	3.9	9.1	8.2	3.5	6.3
Barium, mg/kg	95	1100	740	260	800
Cadmium, mg/kg	0.06	0.34	0.18	0.63	0.44
Chromium, mg/kg	<1.5	36	29	<1.9	20
Lead, mg/kg	12	43	36	20	30
Mercury, mg/kg	<0.03	0.20	0.06	0.05	0.06
Selenium, mg/kg	<2	<1	<2	<2	<1
Silver, mg/kg	<2	<1	<2	<2	<1

Methods: SW846

Thomas L. Stephens  
Laboratory Director

James W. Andrews, Ph.D.  
President

Janette M. Davis  
Vice-President

**SAVANNAH LABORATORIES  
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2820 Industrial Plaza Blvd. (32301)  
(904) 878-3994



LOG NO: 86-0821

Received: 11 APR 86

Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES				
0821-11	Site #1 - 20 - Savannah Plant area 1				
0821-12	Site #1 - 21 - Savannah Plant area 1				
0821-13	Site #2 - 34 - Savannah Plant area 5				
0821-14	Site #2 - 35 - Savannah Plant "				
0821-15	Site #2 - 36 - Savannah Plant "				
PARAMETER	0821-11	0821-12	0821-13	0821-14	0821-15
Arsenic, mg/kg	3.7	2.2	15	11	9.1
Barium, mg/kg	22	940	690	3400	150
Cadmium, mg/kg	0.04	0.07	0.68	0.73	0.61
Chromium, mg/kg	<0.9	40	16	17	19
Lead, mg/kg	6.3	20	23	25	24
Mercury, mg/kg	0.03	0.30	0.2	0.2	0.4
Selenium, mg/kg	<1	<2	<2	<1	<1
Silver, mg/kg	<1	<2	<2	<1	<1

Methods: SW846

James W. Andrews, Ph.D.  
President

Janette M. Davis  
Vice-President

**SAVANNAH LABORATORIES  
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LOG NO: 86-0821

Received: 11 APR 88

Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES				
0821-16	Site #2 - 37 - Savannah Plant <i>site 2</i>				
0821-17	Site #2 - 38 - Savannah Plant "				
0821-18	Site #2 - 39 - Savannah Plant "				
0821-19	Site #2 - 40 - Savannah Plant "				
0821-20	Site #2 - 41 - Savannah Plant "				
PARAMETER	0821-16	0821-17	0821-18	0821-19	0821-20
Arsenic, mg/kg	13	6.5	5.1	11	4.1
Barium, mg/kg	430	570	660	1000	3500
Cadmium, mg/kg	0.56	0.48	0.15	1.2	1.5
Chromium, mg/kg	20	27	15	31	33
Lead, mg/kg	68	23	13	38	1300
Mercury, mg/kg	0.30	0.02	0.2	0.3	0.1
Selenium, mg/kg	<3	<2	<1	<2	<1
Silver, mg/kg	<3	<2	<1	<2	<1

Methods: SW846

James W. Andrews, Ph.D.  
President

Janette M. Davis  
Vice-President

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(912) 354-7858



LOG NO: 86-0821

Received: 11 APR 86

Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES			
0821-21	Site #2 - 42 - Savannah Plant area 2			
0821-22	Site #2 - 43 - Savannah Plant "			
0821-23	Site #2 - 44 - Savannah Plant "			
0821-24	Site #2 - 45 - Savannah Plant "			
PARAMETER	0821-21	0821-22	0821-23	0821-24
Arsenic, mg/kg	9.3	8.5	6.1	22
Barium, mg/kg	2100	840	1400	4700
Cadmium, mg/kg	0.78	0.55	1.8	1.0
Chromium, mg/kg	51	18	16	23
Lead, mg/kg	41	28	50	42
Mercury, mg/kg	0.49	<0.04	0.03	0.20
Selenium, mg/kg	<2	<3	<2	<2
Silver, mg/kg	<2	<3	<2	<2

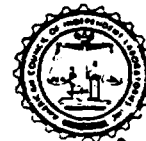
Methods: SW846

Janette M. Davis

James W. Andrews, Ph.D.  
President

Janette M. Davis  
Vice-President

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AND ENVIRONMENTAL SERVICES, INC.**  
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Whitfield Avenue at Shipyard Road (31406)  
(912) 354-7858



LOG NO: 00-0821

Received: 11 APR 86

Mr. Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES				
0821-1	#1 - Savannah Plant				
0821-2	#7 - Savannah Plant				
0821-3	#8 - Savannah Plant				
0821-4	#9 - Savannah Plant				
0821-5	#23 - Savannah Plant				
PARAMETER	0821-1	0821-2	0821-3	0821-4	0821-5
Arsenic, mg/kg	32	9.6	1.5	1.4	3.0
Chromium, mg/kg	44	7.5	11	4.2	4.8
Lead, mg/kg	16	4.3	16	16	8.0
Mercury, mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03

Methods: EPA SW-846

James W. Andrews, Ph.D.  
President

Janette M. Davis  
Vice-President

**SAVANNAH LABORATORIES**  
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LOG NO: 00-0821

Received: 11 APR 86

Mr. Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

**REPORT OF ANALYTICAL RESULTS**

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES				
0821-6	#24 - Savannah Plant				
0821-7	#25 - Savannah Plant				
0821-8	#46 - Savannah Plant				
0821-9	#47 - Savannah Plant				
0821-10	#48 - Savannah Plant				
PARAMETER	0821-6	0821-7	0821-8	0821-9	0821-10
Arsenic, mg/kg	7.3	2.5	26	21	10
Chromium, mg/kg	25	26	53	21	10
Lead, mg/kg	24	45	37	29	8.0
Mercury, mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03

Methods: EPA SW-846



Whitfield Avenue at Shipyard Road (31406)  
(912) 354-7858

LOG NO: 00-0821

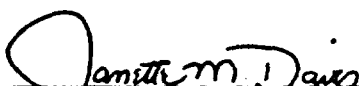
Received: 11 APR 86

Mr. Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES	
0821-11	#49 - Savannah Plant	
0821-12	#50 - Savannah Plant	
PARAMETER	0821-11	0821-12
Arsenic, mg/kg	24	25
Chromium, mg/kg	16	22
Lead, mg/kg	6.6	9.4
Mercury, mg/kg	<0.03	<0.03

Methods: EPA SW-846

  
Janette M. Davis

(912) 354-7858

LOG NO: 86-1181

Received: 21 MAY 86

Mr. Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES				
1181-1	#13 (4' - 5')				
1181-2	#13 (9' - 10')				
1181-3	#16 (4' - 5')				
1181-4	#16 (9' - 10')				
1181-5	#41 (4' - 5')				
PARAMETER	1181-1	1181-2	1181-3	1181-4	1181-5
Lead, mg/kg	4.7	7.2	8.7	5.7	9.5
Mercury, mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03

Methods: EPA SW-846

James W. Andrews, Ph.D.  
President

Janette M. Davis  
Vice-President

**SAVANNAH LABORATORIES  
AND ENVIRONMENTAL SERVICES, INC.**  
P. O. Box 13842 • Savannah, GA 31416-0842  
Whitfield Avenue at Shipyard Road (31406)  
(912) 354-7858



LOG NO: 86-1181

Received: 21 MAY 86

Mr. Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES	
1181-6	#41 (9' - 10')	
PARAMETER		1181-6
Lead, mg/kg		20
Mercury, mg/kg		<0.03

Methods: EPA SW-846

## APPENDIX C

## APPENDIX C

### References

1. Watson, Thomas, 1979. Aquifer Potensial of the Shallow Sediments of the Coastal Area of Georgia in Investigations of Alternative Sources of Ground Water in the Coastal Area of Georgia. Georgia Geologic Survey Open File Report 80-3, pages A1-A30.
2. Sonderegger, John L., Lin D. Pollard and C. W. Cressler, 1978. Quality and Availability of Ground Water in Georgia. Georgia Geologic and Water Resources Division, Information Circular 48, 25 pages.
3. Georgia Soil and Water Conservation Committee, 1981 Resource Conservation Program and Action Plan, Coastal Soil and Water Conservation District, 39 pages.
4. Odom, Ron R., Jerry L. McCollum, Mary Anne Neville and David R. Ettman, 1977. Georgia's Protected Wildlife. Georgia Department of Natural Resources, Game and Fish Division, 51 pages.
5. United States Environmental Protection Agency, 1982. Test Methods for Evaluating Solid Waste, Publication No. SW 846.
6. Sax, Irving N., 1984. Dangerous Properties of Industrial Materials, 6th Edition Van Nostrand Reinhold Company, New York, NY.

## APPENDIX D



Georgia-Pacific Corporation *Eastern Wood Products*  
*Manufacturing Division*  
P.O. Box 105603  
Atlanta, Georgia 30348  
Telephone (404) 521-4000  
Teletype (810) 751-1000

P. 1 of 2

**RECEIVED**

MAY 15 1985

May 14, 1985

Mr. Jeffrey M. Williams, Environmental Specialist  
Environmental Protection Division  
Remedial Actions Unit  
3420 Norman Berry Drive  
7th Floor - Scott Hudgens Building  
Hapeville, Georgia 30354

REMEDIAL ACTIONS UNIT

Re: Past Waste Handling Practice  
Georgia-Pacific - Savannah Facility

Dear Mr. Williams:

As per our recent conversation, we hope this clarifies the information you require in completing the ERRIS Survey.

When we originally submitted information in response to the Waste Management Data Sheet for the above facility, we questioned past managers of the plants, and suppliers of products used in the production. From this information as well as knowledge of the processes we concluded there was no hazardous waste disposed of at this site. However, as a result of our telephone conversation, it is our understanding that you desire information which includes all waste that may have been disposed of at the above site. Therefore, the following information pertains to a chronological history of the site and past solid waste handling activities.

1950 to Present - Georgia-Pacific purchases the existing site from General Plywood and commences manufacturing operations of a hardwood plywood facility. General Plywood built and operated the facility, off and on, from 1946 to 1949.

Early 1960's - Georgia-Pacific commences operations of a resin facility. This plant operated until mid-1970 when it was relocated across town in Port Wentworth.

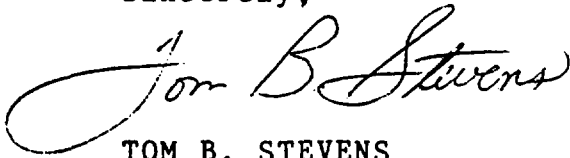
1965 - Georgia-Pacific constructs and commences operations of a pine plywood facility. This plant ceased manufacturing operation in 1979.

Page Two  
Mr. Jeffrey M. Williams  
May 14, 1985

Past Waste Handling Practices - Two on-site land disposal areas were utilized by the three operations for discarding solid waste from 1950 to 1979. Typical items that entered the sites consisted of construction materials, scrap iron, tires, conveyor belts, scrap board, bark, fly ash and some waste from the production lines.

If further discussion is required, contact our Atlanta, Georgia Headquarters at 404-521-5080.

Sincerely,



TOM B. STEVENS  
ENVIRONMENTAL ENGINEER  
EASTERN WOOD PRODUCTS MANUFACTURING DIVISION

TBS:gr

cc: Messrs: W. L. Duke  
A. T. Johnson  
R. L. Burns  
G. W. Tice



PRELIMINARY ASSESSMENT COVER SHEET  
GEORGIA PACIFIC CORPORATION SAVANNAH  
SAVANNAH, GEORGIA - CHATHAM COUNTY  
GAD990741332

A. HISTORY OF SITE

The Georgia Pacific Corporation Savannah facility is located on Old Louisville Road in Savannah, Chatham County, Georgia. The Georgia Pacific Corporation acquired this facility from the General Plywood Plant Corporation in 1949. From approximately 1949 to 1956, Georgia Pacific was engaged in producing 3/4 inch birch plywood. According to plant superintendent Mr. Leon Stephenson, no waste was dumped on site before 1959. Since 1957 this facility has been manufacturing plywood and prefinished wall paneling. According to Mr. Stephenson, on site disposal of approximately three or four fifty-five gallon drums per week of wastes occurred from 1959 to 1965. These wastes consisted of a mixture of solvents, lacquer paint and base coat materials that were derived from the production of prefinished wall paneling. After 1965 these wastes were mixed in a wood fired boiler and burned as fuel. Since 1980 all solvents and sealers and stains used have been water based materials and are considered non-hazardous. Georgia Pacific has withdrawn its Part A permit and is presently classified as a Small Quantity Generator by the Georgia EPD.

B. USE OF HAZARDOUS MATERIALS

Unknown amounts of solvents and paint wastes have been dumped onto the ground at two locations on site (see topographic map).

C. DESCRIPTION OF HAZARDOUS CONDITIONS, INCIDENTS, PERMIT VIOLATIONS

No known permit violations or hazardous incidents have been noted heretofore at the Georgia Pacific Savannah Facility.

D. ROUTES FOR CONTAMINATION

There is a potential for local ground water contamination of the surficial ground water since open dumping of solvents occurred on site from 1959 to 1965.

E. POSSIBLE AFFECTED POPULATION AND RESOURCES

The nearby residents of Woodlawn Terrace are supplied by a municipal well system located in Garden City, Georgia. There are local drinking water wells located approximately 1 to 1 1/2 miles west of the Georgia Pacific facility.

F. RECOMMENDATIONS AND JUSTIFICATIONS

A "low priority" for a Site Inspection is recommended for this facility based on the following conclusions:

Unknown quantities of lacquer based paints and solvents were disposed of on site between 1959 and 1965. A potential for soil contamination exists at the subject site. A potential for local groundwater contamination exists in the areas adjacent to the facility. Conflicting information received from Georgia Pacific personnel warrants a future inspection of this facility.

G. REFERENCE TO SUPPORTING DATA SOURCES

Telephone Conversation Memo - April 30, 1985

To: Mr. Leon Stephenson - Georgia Pacific Corporation - Savannah.

From: Jeffrey Williams - Georgia EPD

RE: Pre-RCRA disposal practices at Georgia Pacific Corp. - Savannah.

Telephone Conversation Memo - May 3, 1985

To: Mr. Larry Rodgers - Georgia EPD - Brunswick.

From: Jeffrey Williams - Georgia EPD

RE: Groundwater Supplies.

Georgia EPD "Waste Management Data Sheet"

Trip Report - By Martha P. - April 5, 1984.

Georgia EPD Files - Georgia Pacific Corporation - Savannah.

JMW/mcw028.

~~Two water wells~~ <sup>Layne-Atlantic</sup> Two water wells drilled for general plywood in 1947.

WELL #1

<u>FEET</u>	<u>SOIL</u>
0 - 6	Yellow Clay
6 - 178	Sand and Sandy Blue Marle
178 - 242	Sandy Blue Marle
242 - 256	Blue Mud
256 - 265	Hard Limestone
265 - 568	Gray Limestone

WELL #2

<u>FEET</u>	<u>SOIL</u>
0 - 2	Top Soil
2 - 25	White Sandy Clay
25 - 240	Blue Marle
240 - 254	Blue Marle w/Shale Rock
254 - 269	Limestone
269 - 274	Limestone, Solid

Owner Georgia Pacific Screen                      Slot                       
Location Louisville Rd., Savannah, GA. Set From                      To                       
Behind warehouse. Well Produces                      GPM at                       
Driller PNC, JEN Pump                       
Well Use Geologic information. Water table                       
Iron content                      ppm

Depth from To	Lithology	Mud Loss	Remarks
0 2½	Fill.	0- 5 5-10	
2½ 3 ¾	Tough, plastic clay.	10-15 15-20	Shuts off mud returns.
3/4 8	Clayey, medium sand.	20-25 25-30	
8 17½	Orange to gray-green, tough, sandy clay. Sand fine to medium.	30-35 35-40	Shuts off mud returns.
7½ 20 ¾	Interbeds very sandy gray clay with coarse sand. Sand increases downward.	40-45 45-50	
3¾ 26½	Coarse to very coarse sand.	50-55 55-60	
6½	Gray, soft, slightly sandy clay. Below 37, with trace to few %	60-65 65-70	
	fine shell fragments. Below 38½ with increasing coarse sand, never	70-75 75-80	
50	more than 10%. Below 42, with 1-2% coarse sand.		
0 51½	Hawthorn in beds of cemented shell fragments.		
1½ 60 TD	Hawthorn, silty clay with traces of fine sand.		

Well Log for Soil Boring 2  
Ga. Pacific, Savannah

Paul N. Clawson  
Geologist

Appendix 7  
Attachme 5

Date 5/21/86

ner	<u>Georgia Pacific</u>	Screen _____	Slot _____
Location	<u>Louisville Rd., Savannah, GA.</u>	Set From _____	To _____
	<u>Near ponds to west.</u>	Well Produces _____	GPM at _____
Filler	<u>PNC, JEM</u>	Pump _____	
Use	<u>Geologic Information.</u>	Water table _____	
		Iron content _____	ppm _____

[illegible]

# RECORD OF TELEPHONIC CONVERSATION

## Site Investigation Program

Routing: Mike Allred Mike Allred 8-4-86 Date: 8/1/86  
S.I., H.A.S. Time: 9:55 a.m. (p.m.)  
 File: Georgia Pacific Corp. Savannah  
 Party Spoken To: Mr. Paul N. Clawson Title: Prof. Geologist  
 Agency/Company: None

Address: \_\_\_\_\_ City: Savannah  
 Brother-in-law Telephone Number: (305) 491 - 4538 State/Zip: Georgia

Subject (file name): Georgia Pacific Corp. Savannah  
 Summary of Call: I called Mr. Clawson in Fort Lauderdale, Fla. to attempt to gather information on shallow wells near the site (his wife stated that she thought that he was the only one in Sav. who put in shallow wells). I asked Mr. Clawson if he knew of any wells,  $\leq 25'$  feet or so that are used for drinking within 3 miles of the Georgia Pacific plant. Mr. Clawson said that he knew of the Ge. Pac. plant and that he knew of 3 private shallow wells within 3 miles of the plant. He stated that he could no longer remember the name of the residents with the wells. He inferred that he drilled the wells himself. (over)

Actions Required: \_\_\_\_\_

Signature: Steve Walker 8/1/86

Follow-up Responses/Additional Comments: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## RECORD OF TELEPHONIC CONVERSATION

## Site Investigation Program

Routing: Reviewed by Mike Ashland 7/16/86 Date: 7/14/86Time: 320 a.m. (p.m.)File: Georgia Pacific Corp. SavannahParty spoken to: Mike MilanTitle: Petty OfficerAgency/Company: U.S. Coast GuardAddress: \_\_\_\_\_ City: SavannahTelephone Number: (912) 944 - 4353 State/Zip: GeorgiaSubject (file name): Georgia Pacific Corp. Savannah

Summary of Call: I called Mr. Milan to inquire as to the effect of tidal action on Pipe Maker's Canal near the site. Mr. Milan said that he was familiar with the canal and that tidal action is probable as far up stream as I-95. The site is between I-95 and the Savannah River.

Actions Required: \_\_\_\_\_

Signature: Steve Walker 7/14/86

Follow-up Responses/Additional Comments: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## RECORD OF TELEPHONIC CONVERSATION

## Site Investigation Program

Routing: SI Reviewed by Michael Date: 7/21/86  
 Time: 2:44 a.m./p.m.  
 File: Georgia Pacific Corp. Savannah  
 Party Spoken To: Mr. Leon Stephenson Title: Plant Superintendent  
 Agency/Company: Georgia Pacific Corp.  
 Address: P.O. Box 367, Old Landville Rd. City: Savannah  
 Telephone Number: (912) - State/Zip: Georgia 31498  
 Subject (file name): \_\_\_\_\_

Summary of Call: A conference call between Rick Horden (Lawyer Ge. Pac.),  
Leon Stephenson (Plant Sup. Ge. Pac.), Tom Stevens (Env. Eng. Ge. Pac.) and Steve  
Walker (Env. Spec. EPD). The call was arranged at the request  
of Georgia Pacific so that I could ask Leon Stephenson  
about the site. Mr. Stephenson stated that 2, 3 or 4 drums <sup>per day</sup> of  
liquid or sludge wastes were generated 1959-1965. This drummed  
waste was simply poured out on the ground in areas 1 and 2 according  
to Mr. Stephenson. He also stated that no sealed drums  
(Full or partly full) were buried in area 1 or area 2.

Actions Required: \_\_\_\_\_

Signature: \_\_\_\_\_

Follow-up Responses/Additional Comments: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



SPECIAL  
ROUTING

TELECON

BY: Williams, J OF: GA. E.P.D.  
FILE# GAO 990741332

DATE: 11-30-85

INCOMING ☐ OUTGOING ☒

PERSON TALKED WITH: Mr. Leon Stephenson -

Georgia Pacific Corp.

PHONE # 912-964-2230

SUBJECT: Pre RLRA disposal practices at the  
Georgia Pacific Corp - Savannah, GA.DETAILS OF CONVERSATION

According to Mr. Stephenson, Georgia Pacific began operations in 1949. Plywood was produced from 1949 to 1956. No on site burning occurred before 1959. Hardwood paneling was produced from 1957 to the present date. Solvents and lacquer paint base coat materials were disposed on site from 1959 to 1965 in two distinct areas according to Mr. Stephenson. These wastes were openly dumped onto the soil and allowed to percolate through. All processes from 1980 to the present date use water based materials and are essentially non-hazardous.

## APPENDIX E

## APPENDIX E


EPA		POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 1 - SITE LOCATION AND INSPECTION INFORMATION				1. IDENTIFICATION	
		01 STATE		02 SITE NUMBER			
		GA		D990741332			
<b>II. SITE NAME AND LOCATION</b>							
01 SITE NAME (Legal common or descriptive name of site)				02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER			
Georgia Pacific Corp. Savannah				P.O. Box 367, Old Louisville Road			
03 CITY		04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG. DIST.	
Savannah		GA	31498	Chatham			
09 COORDINATES		10 TYPE OF OWNERSHIP (Check one)					
LATITUDE 32° 05' 56" 0"		<input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER					
LONGITUDE 081° 10' 483"							
<b>III. INSPECTION INFORMATION</b>							
01 DATE OF INSPECTION		02 SITE STATUS		03 YEARS OF OPERATION			
11 / 21 / 85 MONTH DAY YEAR		<input type="checkbox"/> ACTIVE <input checked="" type="checkbox"/> INACTIVE		1959   1965   UNKNOWN BEGINNING YEAR   ENDING YEAR			
04 AGENCY PERFORMING INSPECTION (Check all that apply)							
<input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input type="checkbox"/> C. MUNICIPAL <input type="checkbox"/> D. MUNICIPAL CONTRACTOR <input checked="" type="checkbox"/> E. STATE <input type="checkbox"/> F. STATE CONTRACTOR <input type="checkbox"/> G. OTHER							
05 CHIEF INSPECTOR		06 TITLE		07 ORGANIZATION		08 TELEPHONE NO.	
Steve Walker		Environmental Specialist		GA EPD		404) 656-7404	
09 OTHER INSPECTORS		10 TITLE		11 ORGANIZATION		12 TELEPHONE NO.	
Johnny Morgan		Environmental Specialist		GA EPD		404) 65607404	
						( )	
						( )	
						( )	
						( )	
						( )	
13 SITE REPRESENTATIVES INTERVIEWED		14 TITLE		15 ADDRESS		16 TELEPHONE NO.	
Mr. Tom Stevens		Env. Engineer		P.O. Box 105603, Atlanta		(404) 521-5080	
Mr. Gerald Tice		Chief Env. Eng.		P. O. Box 105603, Atlanta		(404) 521-4000	
Mr. Lawrence Otwell		Env. Engineer		P. O. Box 105603, Atlanta		(404) 521-5081	
						( )	
						( )	
						( )	
						( )	
17 ACCESS GAINED BY (Check one) <input checked="" type="checkbox"/> PERMISSION <input type="checkbox"/> WARRANT		18 TIME OF INSPECTION 0820 hrs.		19 WEATHER CONDITIONS heavy rain, high winds			
<b>IV. INFORMATION AVAILABLE FROM</b>							
01 CONTACT		02 OF (Agency/Organization)				03 TELEPHONE NO.	
Mr. Tom Stevens		Environmental Engineer				404) 521-5080	
04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM		05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE		
Steve Walker		GA EPD	Site Inv. Prog.	(404) 656-7404	8 / 1 / 86 MONTH DAY YEAR		

EPA FORM 2070-13 (7-81)

## APPENDIX E

[illegible]

## APPENDIX E

 <div style="display: inline-block; vertical-align: middle; text-align: center;"> <b>POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT</b>  <b>PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS</b> </div>		<b>I. IDENTIFICATION</b> <small>01 STATE   02 SITE NUMBER</small> GA   0990741332	
<b>II. HAZARDOUS CONDITIONS AND INCIDENTS</b>			
01 <input checked="" type="checkbox"/> <b>A. GROUNDWATER CONTAMINATION</b> 03 POPULATION POTENTIALLY AFFECTED: <u>0-100</u>	02 <input checked="" type="checkbox"/> OBSERVED (DATE: <u>11-21-85</u> ) 04 NARRATIVE DESCRIPTION <p>Potential from liquid wastes, poured out on the ground. Documented chromium contamination in shallow ground water at disposal area 1.</p>	<input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED	
01 <input type="checkbox"/> <b>B. SURFACE WATER CONTAMINATION</b> 03 POPULATION POTENTIALLY AFFECTED: _____	02 <input type="checkbox"/> OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION	<input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED	
01 <input type="checkbox"/> <b>C. CONTAMINATION OF AIR</b> 03 POPULATION POTENTIALLY AFFECTED: _____	02 <input type="checkbox"/> OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION	<input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED	
01 <input type="checkbox"/> <b>D. FIRE/EXPLOSIVE CONDITIONS</b> 03 POPULATION POTENTIALLY AFFECTED: _____	02 <input type="checkbox"/> OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION	<input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED	
01 <input type="checkbox"/> <b>E. DIRECT CONTACT</b> 03 POPULATION POTENTIALLY AFFECTED: _____	02 <input type="checkbox"/> OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION	<input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED	
01 <input checked="" type="checkbox"/> <b>F. CONTAMINATION OF SOIL</b> 03 AREA POTENTIALLY AFFECTED: <u>5-10</u> <small>(Acres)</small>	02 <input checked="" type="checkbox"/> OBSERVED (DATE: <u>11-21-85</u> ) 04 NARRATIVE DESCRIPTION <p>Toluene and methyl isobutyl ketone confirmed in soils in 1 of 2 disposal areas</p>	<input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED	
01 <input checked="" type="checkbox"/> <b>G. DRINKING WATER CONTAMINATION</b> 03 POPULATION POTENTIALLY AFFECTED: <u>0-100</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION <p>From liquid/sludge wastes poured out onto the ground 1959-1965</p>	<input checked="" type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED	
01 <input type="checkbox"/> <b>H. WORKER EXPOSURE/INJURY</b> 03 WORKERS POTENTIALLY AFFECTED: _____	02 <input type="checkbox"/> OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION	<input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED	
01 <input type="checkbox"/> <b>I. POPULATION EXPOSURE/INJURY</b> 03 POPULATION POTENTIALLY AFFECTED: _____	02 <input type="checkbox"/> OBSERVED (DATE: _____) 04 NARRATIVE DESCRIPTION	<input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED	

### IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D990741332

01 ☐ J. DAMAGE TO FLORA  
04 NARRATIVE DESCRIPTION02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED01 ☐ K. DAMAGE TO FAUNA  
04 NARRATIVE DESCRIPTION *Include name(s) of species!*02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED01 F L CONTAMINATION OF FOOD CHAIN  
04 NARRATIVE DESCRIPTION02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED01 ☒ M. UNSTABLE CONTAINMENT OF WASTES

02 ☐ OBSERVED (DATE \_\_\_\_\_) ☐ POTENTIAL ☒ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 1-100

#### 04 NARRATIVE DESCRIPTION

POPULATION POTENTIALLY AFFECTED: <u>1-100</u>	04 NARRATIVE DESCRIPTION
Long-time employee of the facility indicated that approximately 2-4 drums of waste liquids & sludge (containing solvents) were poured out on the ground weekly.	

01 ☐ N. DAMAGE TO OFFSITE PROPERTY  
04 NARRATIVE DESCRIPTION02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED01 000 CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs  
04 NARRATIVE DESCRIPTION02 ☐ OBSERVED (DATE: \_\_\_\_\_) ☐ POTENTIAL ☐ ALLEGED01 P. ILLEGAL UNAUTHORIZED DUMPING  
04 NARRATIVE DESCRIPTION02 ( ) OBSERVED (DATE: \_\_\_\_\_ )      ☐ POTENTIAL      ☐ ALLEGED

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 0-100

#### IV. COMMENTS

## V. SOURCES OF INFORMATION, no specific references to U.S. State Dept. sample analysis reports.

STATE FILES ATTACHED

# APPENDIX E



## POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

### I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
GA D990741332

### II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
<input checked="" type="checkbox"/> A. NPDES	GA0003051	6/15/84	5/31/89	tested for BOD, pH, Sus.
<input type="checkbox"/> B. UIC				solids every 2 months
<input checked="" type="checkbox"/> C. AIR	2436-025-8221-0	-	-	bag house sanderdust, glues
<input type="checkbox"/> D. RCRA				limit of .27lbs./10 <sup>6</sup> BTU
<input type="checkbox"/> E. RCRA INTERIM STATUS				
<input type="checkbox"/> F. SPCC PLAN				
<input checked="" type="checkbox"/> G. STATE (Specify)	025-0019	1975	-	ground water withdrawal of
<input type="checkbox"/> H. LOCAL (Specify)				100,000 gpd from 2 wells.
<input type="checkbox"/> I. OTHER (Specify)				
<input type="checkbox"/> J. NONE				

### III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE	04 TREATMENT (Check all that apply)	05 OTHER
<input type="checkbox"/> A. SURFACE IMPOUNDMENT <input type="checkbox"/> B. PILES <input type="checkbox"/> C. DRUMS, ABOVE GROUND <input type="checkbox"/> D. TANK, ABOVE GROUND <input type="checkbox"/> E. TANK, BELOW GROUND <input type="checkbox"/> F. LANDFILL <input type="checkbox"/> G. LANDFARM <input checked="" type="checkbox"/> H. OPEN DUMP <input type="checkbox"/> I. OTHER (Specify)	approx. 312	yds <sup>3</sup>	<input type="checkbox"/> A. INCENERATION <input type="checkbox"/> B. UNDERGROUND INJECTION <input type="checkbox"/> C. CHEMICAL/PHYSICAL <input type="checkbox"/> D. BIOLOGICAL <input type="checkbox"/> E. WASTE OIL PROCESSING <input type="checkbox"/> F. SOLVENT RECOVERY <input type="checkbox"/> G. OTHER RECYCLING/RECOVERY <input type="checkbox"/> H. OTHER (Specify)	<input type="checkbox"/> A. BUILDINGS ON SITE  06 AREA OF SITE 6 ± (Acres)

### 07 COMMENTS

Liquid wastes poured out onto ground  
 quantity = 4 drums per week, for 6 years  
 = 312 tons or cubic yards  
 (4 drums = 1 ton)  
 or 1 yd<sup>3</sup>

### IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)	<input type="checkbox"/> A. ADEQUATE, SECURE <input type="checkbox"/> B. MODERATE <input type="checkbox"/> C. INADEQUATE, POOR <input checked="" type="checkbox"/> D. INSECURE, UNSOUND, DANGEROUS
02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC. Long-time employee of facility stated that from 1959-1965, approx. 4 drums of liquid wastes were poured out onto the ground weekly in 2 disposal areas of GA Pacific property.	

### V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
02 COMMENTS Area is fenced and the entrance is guarded	

### VI. SOURCES OF INFORMATION (List all sources used, e.g., state files, sample analysis, reports)

STATE FILES ATTACHED

## APPENDIX E

EPA FORM 2070-1 (3-7-81)



## APPENDIX E

<b>POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT</b> <b>PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA</b>		<b>I. IDENTIFICATION</b> 01 STATE: <u>GA</u> 02 SITE NUMBER: <u>D990741332</u>	
<b>VI. ENVIRONMENTAL INFORMATION</b>			
01 PERMEABILITY OF UNSATURATED ZONE (Check one)			
<input type="checkbox"/> A. $10^{-6} - 10^{-8}$ cm/sec <input checked="" type="checkbox"/> B. $10^{-4} - 10^{-6}$ cm/sec <input type="checkbox"/> C. $10^{-4} - 10^{-3}$ cm/sec <input type="checkbox"/> D. GREATER THAN $10^{-3}$ cm/sec			
02 PERMEABILITY OF BEDROCK (Check one)			
<input type="checkbox"/> A. IMPERMEABLE (Less than $10^{-9}$ cm/sec) <input type="checkbox"/> B. RELATIVELY IMPERMEABLE ( $10^{-4} - 10^{-6}$ cm/sec) <input type="checkbox"/> C. RELATIVELY PERMEABLE ( $10^{-2} - 10^{-4}$ cm/sec) <input checked="" type="checkbox"/> D. VERY PERMEABLE (Greater than $10^{-2}$ cm/sec)			
03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
240 (ft)	1 (ft)	5-6	
06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE SITE SLOPE	DIRECTION OF SITE SLOPE    TERRAIN AVERAGE SLOPE
4 (in)	3.5 (in)	1 %	NW    1-2 %
09 FLOOD POTENTIAL		10	
SITE IS IN <u>100</u> approx. YEAR FLOODPLAIN		<input type="checkbox"/> SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY	
11 DISTANCE TO WETLANDS (5 acres minimum)		12 DISTANCE TO CRITICAL HABITAT (of endangered species)	
ESTUARINE    OTHER A. <u>10</u> (mi)    B. <u>1/2</u> (mi)		<u>10</u> (mi) ENDANGERED SPECIES: <u>Humpback Whale</u>	
13 LAND USE IN VICINITY			
DISTANCE TO COMMERCIAL/INDUSTRIAL		RESIDENTIAL AREAS: NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES AGRICULTURAL LANDS PRIME AG LAND    AG LAND	
A. <u>1/10</u> (mi)		B. <u>1/10</u> (mi)    C. <u>&lt; 5</u> (mi)    D. <u>1</u> (mi)	
14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY			
The site (composed of 2 disposal areas) exists on generally flat, level land in central Chatham County			
<b>VII. SOURCES OF INFORMATION</b> (Cite specific references, e.g., state files, sample analysis reports)			
STATE FILES			



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
GA D990741332

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	2	EPD LAB	ATTACHED
SURFACE WATER			
WASTE	1	EPD LAB	ATTACHED
AIR			
RUNOFF			
SPILL			
SOIL	46	EPD LAB and Sav. Labs(contract lab for	ATTACHED
VEGETATION		GA. Pacific)	
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS

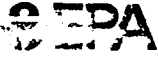
IV. PHOTOGRAPHS AND MAPS

01 TYPE <input checked="" type="checkbox"/> GROUND <input checked="" type="checkbox"/> AERIAL	02 IN CUSTODY OF <u>EPD Site-Investigation Program</u> <small>(Name of organization or individual)</small>
03 MAPS <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	04 LOCATION OF MAPS <u>EPD - Site Investigation Program files</u>

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION (Cite specific references, e.g., maps, data files, sample analysis reports)

STATE FILES ATTACHED

		<b>POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 7 - OWNER INFORMATION</b>				<b>I. IDENTIFICATION</b>	
				01 STATE	02 SITE NUMBER		
				GA	0990741332		
<b>II. CURRENT OWNER(S)</b>				<b>PARENT COMPANY (If applicable)</b>			
01 NAME		02 D+B NUMBER		08 NAME		09 D+B NUMBER	
Georgia Pacific Corp.		0990741332		SAME			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE	
P. O. Box 105603							
05 CITY	06 STATE	07 ZIP CODE		12 CITY	13 STATE	14 ZIP CODE	
Atlanta	GA	30348					
01 NAME		02 D+B NUMBER		08 NAME		09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		12 CITY	13 STATE	14 ZIP CODE	
01 NAME		02 D+B NUMBER		08 NAME		09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		12 CITY	13 STATE	14 ZIP CODE	
01 NAME		02 D+B NUMBER		08 NAME		09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		12 CITY	13 STATE	14 ZIP CODE	
01 NAME		02 D+B NUMBER		08 NAME		09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		12 CITY	13 STATE	14 ZIP CODE	
<b>III. PREVIOUS OWNER(S) (List most recent first)</b>				<b>IV. REALTY OWNER(S) (If applicable; list most recent first)</b>			
01 NAME		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
General Plywood							
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
Old Louisville Road							
05 CITY	06 STATE	07 ZIP CODE		05 CITY	06 STATE	07 ZIP CODE	
Savannah	GA	31498					
01 NAME		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		05 CITY	06 STATE	07 ZIP CODE	
01 NAME		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		05 CITY	06 STATE	07 ZIP CODE	
<b>V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)</b>							
STATE FILES							



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
3A 0990741332

II. CURRENT OPERATOR (Provide if different from owner)				OPERATOR'S PARENT COMPANY (If applicable)			
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER					
III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)				PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)			
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD					
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD					
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD					
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD					
IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)							



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
GA D990741332

II. ON-SITE GENERATOR

01 NAME Georgia Pacific Corp.		02 D+B NUMBER D990741332	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) P.O. Box 367, Old Louisville Rd.		04 SIC CODE	
05 CITY Savannah	06 STATE GA	07 ZIP CODE 31498	

III. OFF-SITE GENERATOR(S)

01 NAME		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		05 CITY	06 STATE	07 ZIP CODE	
01 NAME		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		05 CITY	06 STATE	07 ZIP CODE	

IV. TRANSPORTER(S)

01 NAME		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		05 CITY	06 STATE	07 ZIP CODE	
01 NAME		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE		05 CITY	06 STATE	07 ZIP CODE	

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

STATE FILES ATTACHED

# APPENDIX E



## POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 10 - PAST RESPONSE ACTIVITIES

### I. IDENTIFICATION


01 STATE	02 SITE NUMBER
GA	D990741332

### II. PAST RESPONSE ACTIVITIES


01 <input type="checkbox"/> A. WATER SUPPLY CLOSED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> B. TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> C. PERMANENT WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> D. SPILLED MATERIAL REMOVED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> F. WASTE REPACKAGED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> G. WASTE DISPOSED ELSEWHERE 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> H. ON SITE BURIAL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> K. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> L. ENCAPSULATION 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> M. EMERGENCY WASTE TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> N. CUTOFF WALLS 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> O. EMERGENCY DIKING SURFACE WATER DIVERSION 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> P. CUTOFF TRENCHES, SUMP 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 <input type="checkbox"/> Q. SURFACE CUTOFF WALL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____

EPA FORM 2070-107-010

## APPENDIX E

	<b>POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT</b> PART 10 - PAST RESPONSE ACTIVITIES	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: left; padding: 2px;">I. IDENTIFICATION</th> </tr> <tr> <td style="width: 50%; padding: 2px;">01 STATE GA</td> <td style="width: 50%; padding: 2px;">02 SITE NUMBER D990741332</td> </tr> </table>	I. IDENTIFICATION		01 STATE GA	02 SITE NUMBER D990741332
I. IDENTIFICATION						
01 STATE GA	02 SITE NUMBER D990741332					
<b>II. PAST RESPONSE ACTIVITIES</b> <i>(Continued)</i>						
01 <input type="checkbox"/> R. BARRIER WALLS CONSTRUCTED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____				
01 <input type="checkbox"/> S. CAPPING/COVERING 04 DESCRIPTION	02 DATE _____	03 AGENCY _____				
01 <input type="checkbox"/> T. BULK TANKAGE REPAIRED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____				
01 <input type="checkbox"/> U. GROUT CURTAIN CONSTRUCTED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____				
01 <input type="checkbox"/> V. BOTTOM SEALED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____				
01 <input type="checkbox"/> W. GAS CONTROL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____				
01 <input type="checkbox"/> X. FIRE CONTROL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____				
01 <input type="checkbox"/> Y. LEACHATE TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____				
01 <input type="checkbox"/> Z. AREA EVACUATED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____				
01 <input type="checkbox"/> 1. ACCESS TO SITE RESTRICTED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____				
01 <input type="checkbox"/> 2. POPULATION RELOCATED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____				
01 <input checked="" type="checkbox"/> 3. OTHER REMEDIAL ACTIVITIES 04 DESCRIPTION	02 DATE <u>late 1985</u>	03 AGENCY <u>GA Pacific</u>				
Installed numerous shallow ground water observation wells around the 2 disposal areas. These wells were installed to obtain water level measurements to deduce shallow ground water flow directions.						
<b>III. SOURCES OF INFORMATION</b> <i>(Cite specific references, e.g., state files, sample analysis reports)</i>						
STATE FILES ATTACHED						

APPENDIX E

	<b>POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT</b> PART 11 - ENFORCEMENT INFORMATION		<b>I. IDENTIFICATION</b>	
	01 STATE GA	02 SITE NUMBER D990741332		
<b>II. ENFORCEMENT INFORMATION</b>				
01 PAST REGULATORY ENFORCEMENT ACTION <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				
02 STATE, LOCAL REGULATORY ENFORCEMENT ACTION				
<b>III. SOURCES OF INFORMATION</b> <small>(Cite specific references e.g. state laws, sample analysis reports)</small>				
STATE FILES ATTACHED				

EPA FORM 2070-13 (7-81)



## APPENDIX F

Facility name: Georgia Pacific Corp. Savannah

Location: P.O. Box 367, Old Louisville Rd., Savannah, Georgia

EPA Region: IV

Person(s) in charge of the facility: Mr. Tom Stevens - Environmental Engineer  
Mr. Leon Stephenson - Plant Superintendent

Name of Reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

General description of the facility:  
 (For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

The Georgia Pacific Corp. facility near Savannah consists of a plywood and wall paneling facility which has operated since 1949. From 1959 until 1965, the facility generated from 2-4 drums of liquid/sludge waste solvents, paints, min. spirits, etc. <sup>per week</sup> These wastes were poured out onto the ground at 2 areas behind the manufacturing plant. Sampling by the Ga. EPD on 11/21/85 indicated that crushed drums containing Toluene and Methyl Isobutyl Ketone were present in one of the areas.

Scores:  $S_M = 20.44$  ( $S_{GW} = 34.30$   $S_{SW} = 8.58$   $S_a = 0$ )  
 $S_{FE} = \text{Not Scored}$   
 $S_{DC} = 12.50$

FIGURE 1  
HRS COVER SHEET

Rating Factor	Assigned Value (Circle One)	Multi- plier	Score	Max. Score	Ref. (Section)
<b>1</b> Observed Release	<u>0</u> 45	1	<u>0</u>	45	4.1
If observed release is given a value of 45, proceed to line <b>4</b> . If observed release is given a value of 0, proceed to line <b>2</b> .					
<b>2</b> Route Characteristics					4.2
Facility Slope and Intervening Terrain	<u>0</u> 1 2 3	1	<u>0</u>	3	
1-yr. 24-hr. Rainfall	0 1 2 <u>3</u>	1	<u>3</u>	3	
Distance to Nearest Surface Water	0 1 <u>2</u> 3	2	<u>4</u>	6	
Physical State	0 1 2 <u>3</u>	1	<u>3</u>	3	
Total Route Characteristics Score			<u>10</u>	15	
<b>3</b> Containment	0 1 2 <u>3</u>	1	<u>3</u>	3	4.3
<b>4</b> Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 12 15 <u>18</u>	1	<u>18</u>	18	
Hazardous Waste Quantity	0 1 2 3 4 <u>5</u> 6 7 8	1	<u>5</u>	8	
Total Waste Characteristics Score			<u>23</u>	26	
<b>5</b> Targets					4.5
Surface Water Use	0 1 <u>2</u> 3	3	<u>6</u>	9	
Distance to a Sensitive Environment	0 <u>1</u> 2 3	2	<u>2</u>	6	
Population Served/Distance to Water Intake Downstream	<u>0</u> 4 6 8 10 12 16 18 20 24 30 32 35 40	1	<u>0</u>	40	
Total Targets Score			<u>8</u>	55	
<b>6</b> If line <b>1</b> is 45, multiply <b>1</b> x <b>4</b> x <b>5</b> If line <b>1</b> is 0, multiply <b>2</b> x <b>3</b> x <b>4</b> x <b>5</b>			<u>5520</u>	64,350	
<b>7</b> Divide line <b>6</b> by 64,350 and multiply by 100			$S_{SW} = \underline{8.58}$		

**FIGURE 7**  
**SURFACE WATER ROUTE WORK SHEET**

	S	S <sup>2</sup>
Groundwater Route Score (S <sub>gw</sub> )	34.30	1176.49
Surface Water Route Score (S <sub>sw</sub> )	8.58	73.62
Air Route Score (S <sub>a</sub> )	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		1250.11
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		35.36
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		20.44

FIGURE 10  
WORKSHEET FOR COMPUTING S<sub>M</sub>

Direct Contact Work Sheet						
Rating Factor	Assigned Value (Circle One)	Multi- plier	Score	Max. Score	Ref. (Section)	
<b>1</b> Observed Incident	<u>0</u> 45	1	<u>0</u>	45	8.1	
If line <b>1</b> is 45, proceed to line <b>4</b> If line <b>1</b> is 0, proceed to line <b>2</b>						
<b>2</b> Accessibility	0 <u>1</u> 2 3	1	<u>1</u>	3	8.2	
<b>3</b> Containment	0 <u>15</u>	1	<u>15</u>	15	8.3	
<b>4</b> Waste Characteristics Toxicity	0 1 2 <u>3</u>	5	<u>15</u>	15	8.4	
<b>5</b> Targets					8.5	
Population Within a 1-Mile Radius	0 1 2 <u>3</u> 4 5	4	<u>12</u>	20		
Distance to a Critical Habitat	<u>0</u> 1 2 3	4	<u>0</u>	12		
Total Targets Score			<u>12</u>	32		
<b>6</b> If line <b>1</b> is 45, multiply <b>1</b> x <b>4</b> x <b>5</b> If line <b>1</b> is 0, multiply <b>2</b> x <b>3</b> x <b>4</b> x <b>5</b>			<u>2700</u>	21,600		
<b>7</b> Divide line <b>6</b> by 21,600 and multiply by 100			SDC = <u>12.50</u>			

**FIGURE 12**  
**DIRECT CONTACT WORK SHEET**

**POOR LEGIBILITY**

**PORTIONS OF THIS DOCUMENT  
MAY BE UNREADABLE, DUE TO  
THE QUALITY OF THE  
ORIGINAL**

DOCUMENTATION RECORDS  
FOR  
HAZARD RANKING SYSTEM

INSTRUCTIONS: As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference. Include the location of the document.

FACILITY NAME: Georgia Pacific Corp. Savannah

LOCATION: P.O. Box 367, Old Louisville Rd., Savannah Ga. 31498

DATE SCORED: 7/31/86

PERSON SCORING: Steve Walker, Site Investigator, Ga. EPD

PRIMARY SOURCE(S) OF INFORMATION (e.g., EPA region, state, FIT, etc.):

State files

FACTORS NOT SCORED DUE TO INSUFFICIENT INFORMATION:

Fire and Explosions

Air

COMMENTS OR QUALIFICATIONS:

Air route was sampled with an HNU photoionizer. On site - cant readings were not significantly different than background readings.

GROUND WATER ROUTE

1 OBSERVED RELEASE

score = 45

Contaminants detected (5 maximum):

Chromium

Arsenic

Lead

(only three found)

ref. #1, p.3

Rationale for attributing the contaminants to the facility:

Sampling point (shallow, observation well) was located adjacent to area 1. well site had 1/2 mile of lead in chromium.

(page 2)  
\*\*\*

ref. #1, p.3 and #2

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern:

Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern:

Depth from the ground surface to the lowest point of waste disposal storage:



Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

Mean annual lake or seasonal evaporation (list months for seasonal):

Net precipitation (subtract the above figures):

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Permeability associated with soil type:

Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

\* \* \*

### 3 CONTAINMENT

#### Containment

Method(s) of waste or leachate containment evaluated:

Method with highest score:

### 4 WASTE CHARACTERISTICS

#### Toxicity and Persistence

Score = 18

Compound(s) evaluated:

Arsenic

Chromium

Toluene

methyl Isobutyl Ketone

Lead

Compound with highest score:

Lead = 18

Arsenic = 18

Chromium = 18

ref. #3

#### Hazardous Waste Quantity

Score = 5

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

312 cubic yards

ref. #4

and sludge

Basis of estimating and/or computing waste quantity:

4 drums liquid waste per week for 6 years (312 weeks). If 4 drums = 1 cubic yard (ref. #3), then approximately 312 cubic yards of liquid and sludge waste were released on site.

ref. #3 and #4.

# 3 TARGETS

Ground Water Use value = 3

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

Drinking water

ref. # 5

Distance to Nearest Well - value = 4

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply: Mr. Cleason indicated that the

shallow, drinking water wells that he was familiar with were in the vicinity of Old Louisville Road (exact location unspecified). Closest occupied residence is approx. 1000 feet south of area.

ref. # 5 and # 7

Distance to above well or building:

1000 feet

ref. # 7

Population Served by Ground Water Wells Within a 3-Mile Radius value = 1

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

3 residences, Number of persons living in each residence unknown, therefore assumed to be 3.8 (ref. # 5)

ref. # 3, 5 and 7

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre): Irrigation of crops by ground water is not

practiced on a large scale in the vicinity of the site.

ref. # 8

Total population served by ground water within a 3-mile radius:

3 residences (ref. # 3) 3.8 persons per residence (ref. # 3)

= 11.4 persons

= 11 persons

ref. # 3 and # 5

5

Score = 10

SURFACE WATER ROUTE

1 OBSERVED RELEASE

Score = 0

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

None, note not applicable

Rationale for attributing the contaminants to the facility:

\*\*\*

2 ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Score = 0

Average slope of facility in percent:

1%

ref. # 7

Name/description of nearest downslope surface water:

Pipe Makers Canal - 1/2 mile NW of site

ref. # 7

Average slope of terrain between facility and above-cited surface water body in percent:

1%

ref. # 7

Is the facility located either totally or partially in surface water?

No

ref. # 7

Is the facility completely surrounded by areas of higher elevation?

No.

ref. #9

1-Year 24-Hour Rainfall in Inches

3.5

Score = 3

ref. #3

Distance to Nearest Downslope Surface Water

1/2 mile - Pipe Maker's Canal

Score = 4

ref. #7

Physical State of Waste

liquid and sludge

Score = 3

ref. #4

\*\*\*

### 3 CONTAINMENT

Containment

Score = 3

Method(s) of waste or leachate containment evaluated:

was simply poured out onto the ground.

waste pile, uncovered (was)

ref. #4

Method with highest score:

waste pile, uncovered

ref. #3

#### 4 WASTE CHARACTERISTICS

##### Toxicity and Persistence

Score = 18

Compound(s) evaluated

Arsenic  
Lead  
Toluene  
methyl isobutyl ketone  
Chromium

ref. #1

Compound with highest score:

Lead = 18  
Chromium = 18  
Arsenic = 18

ref. #3

##### Hazardous Waste Quantity

Score = 5

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

312 cubic yards

ref. #4

Basis of estimating and/or computing waste quantity:

(ref. #4) 4 drums liquid and sludge waste per week for 6 years (312 weeks). If 4 drums = 1 cubic yard (ref. #3), then approximately 312 cubic yards of liquid and sludge waste were released on site.

ref. #3 and #4

\*\*\*

#### 5 TARGETS

##### Surface Water Use

Score = 6

Use(s) of surface water within 3 miles downstream of the hazardous substance:

Fishing

ref. #10

Is there tidal influence?

yes

ref. # ~~X~~ 11

Distance to a Sensitive Environment

Score = 2

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

> 2 miles

ref. # ~~X~~ 12

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

1/2 mile to Swamp bordering Pipe Makers Canal

ref. # ~~X~~ 7

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:

> 1 m.ye

# 7 # 13  
ref. # ~~X~~ 13  
hard # ~~X~~

Population Served by Surface Water

Score = 0

Location(s) of water-supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static water bodies) downstream of the hazardous substance and population served by each intake:

# 12 + # 14

No intakes present downstream from Site

ref. # ~~X~~ 13

Computation of land area irrigated by above-cited intake(s) and  
conversion to population (1.5 people per acre):

*None*

ref. #8

Total population served:

*None*

*#8 and #14*

ref. ~~#7 and #13~~

Name/description of nearest of above water bodies:

*N.A.*

Distance to above-cited intakes, measured in stream miles.

*N.A.*



AIR ROUTE

1 OBSERVED RELEASE

Score = 0

Contaminants detected:

None detected with HNU photoionizer

Date and location of detection of contaminants

Methods used to detect the contaminants:

Rationale for attributing the contaminants to the site:

\* \* \*

2 WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

Most incompatible pair of compounds:

Toxicity

Most toxic compound:

Hazardous Waste Quantity

Total quantity of hazardous waste:

Basis of estimating and/or computing waste quantity:

\* \* \*

3 TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi

0 to 1 mi

0 to 1/2 mi

0 to 1/4 mi

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

Distance to critical habitat of an endangered species, if 1 mile or less:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

FIRE AND EXPLOSION

1 CONTAINMENT

*Not Ranked*      *Score = 0*

Hazardous substances present:

Type of containment, if applicable:

\* \* \*

2 WASTE CHARACTERISTICS

Direct Evidence

Type of instrument and measurements:

Ignitability

Compound used:

Reactivity

Most reactive compound:

Incompatibility

Most incompatible pair of compounds:

\* \* \*

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

Basis of estimating and/or computing waste quantity:

\* \* \*

3 TARGETS

Distance to Nearest Population

Distance to Nearest Building

Distance to Sensitive Environment

Distance to wetlands:

Distance to critical habitat:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

Population Within 2-Mile Radius

Buildings Within 2-Mile Radius

DIRECT CONTACT

1 OBSERVED INCIDENT *Score = 0*

Date, location, and pertinent details of incident:

\*\*\*

2 ACCESSIBILITY *Score = 1*

Describe type of barrier(s): *partially fenced, security guard*

\*\*\*

*ref. #14*  
3 CONTAINMENT *Score = 15*

Type of containment, if applicable: *not contained*

*ref. #4*

\*\*\*

4 WASTE CHARACTERISTICS

Toxicity *Score = 15*

Compounds evaluated:

*lead*  
*Arsenic*  
*Chromium*

*ref. #1*

Compound with highest score: *Toluene*  
*Methyl Isobutyl ketone*  
*lead - 18*

*ref. #3*

*Arsenic*  
*Chromium*

5 TARGETS

Population within one-mile radius

Score = 12  
2075 - house count on referenced topo. map.

ref. 0

Distance to critical habitat (of endangered species)

Score = 0  
> 1 mile

ref. # 12



## APPENDIX F

### References to HRS

1. Laboratory analysis reports from samples collected at the site on 11/21/85 and 4/11/86. Laboratory analysis by EPD laboratory and Savannah Laboratories and Environmental Services, Inc.
2. Georgia EPD, 1986. Site Investigation Report (Draft) by Steve Walker, Georgia Pacific Corporation Savannah, Appendix A, Figure 2. Site Sketch map showing locations of the 2 shallow ground water samples obtained by the EPD on 11/21/85.
3. National Oil and Hazardous Substances Contingency Plan. Appendix A, 40 CFR, Part 300, 47 Federal Register 31219.
4. Stephenson, Leon, 1986. Plant Superintendent, Georgia Pacific Corporation Savannah. Record of telephonic conversation 7/21/86, RE: past waste disposal activities at the site.
5. Clawson, Paul N., 1986. Consulting Geologist, Record of Telephonic Conversation 8/1/86, RE: shallow drinking water wells within 3 miles of the site.
6. Lindsey, Charles, 1986. Environmental Health Specialist, Chatham County Health Department. Record of Telephonic Conversation 7/29/86, RE: shallow wells in Chatham County.
7. Georgia EPD, 1986. Site Investigation Report (Draft), Georgia Pacific Corporation Savannah, Appendix A, Figure 1.
8. Shirley, Jim, 1986. Chatham County Extension Agent, Georgia Agricultural Extension Service. Record of Telephonic Conversation 7/29/86, RE: irrigation from shallow ground water and surface water near the site.
9. U. S. Geological Survey, 1980. Garden City Quadrangle Map, 7.5 minute topographic series, contour interval 1.5 meters, scale 1:24,000. Map shows slope at and northwest of the site.
10. Haley, Bill, 1986. Conservation Corporal, Game and Fish Division, Georgia Department of Natural Resources. Record of Telephonic Conversation 7/28/86, RE: Fishing in Pipe Maker's Canal.
11. Milan, Mike, 1986. Petty Officer, U. S. Coast Guard. Record of Telephonic Conversation 7/14/86, RE: tidal influence on Pipe Maker's Canal.
12. Georgia EPD, 1986. Site Investigation Report (Draft) by Steve Walker, Georgia Pacific Corporation Savannah, Appendix A, Figure 3.

13. Odom, Ron R., Jerry L. McCollum, Mary Anne Neville and David R. Ettman, 1977. Georgia's Protected Wildlife. Game and Fish Division, Georgia Department of Natural Resources, pages 42-1 and 42-2.
14. Weil, William, 1986. Operations Superintendent, Surface Water Division, Savannah Water Department, Record of Telephonic Conversation 7/30/86, RE: use of water from the Savannah River and Pipe Maker's Canal.
15. Walker, Steve, 1986. Memorandum to file, RE: observations made while on site on 11/21/86.

GEORGIA ENVIRONMENTAL PROTECTION DIVISION

LABORATORY REPORT

HRS Reference #1  
P.1 of 16

SAMPLE  
DATE:

4/11/86

PROJECT:

Gr. Pacific - Savannah

COLLECTOR:

Walker

HW LOG NO.

1870

DATE

REC'D

4-14-86

LABEL

GP-5

TIME

REC'D

1430

REC'D

BY:

D. Reed

DEL

BY:

S. Walker

Soil

- duplicate  
from sample  
station #11

Harold Sanford

LABORATORY MANAGER

DATE: 5-29-86

PARAMETERS

LAB NO.

HW 1870

Volatile Organic Compounds

mg/kg

<1

pH

(10%)

5.6

Total

Ag

mg/kg

<5

"

As

"

<15

"

Ba

"

1800

"

Cd

"

<5

"

Cr

"

64

"

Pb

"

190

"

Se

"

<25

EP

Ag

ug/L

<20

"

As

"

<60

"

Ba

"

210

"

Cd

"

<20

"

Cr

"

<20

"

Pb

"

<50

"

Se

"

<100

Bis (2 Ethyl Hexyl) Phthalate

mg/kg day

39

RECEIVED

REMARKS:

REMEDIAL ACTIONS UNIT

GEORGIA ENVIRONMENTAL PROTECTION DIVISION

LABORATORY REPORT

HRS Reference #1  
p.2 of 16

SAMPLE  
DATE:

4/11/86

PROJECT:

Ga. Pacific - Savannah

COLLECTOR:

Walker

HW LOG NO.

1869

DATE

REC'D 4-14-86

LABEL

TIME

REC'D 1430

REC'D

BY: A Reed

DEL

BY: S. Walker

Harold Sanford

LABORATORY MANAGER

GP-D

Waste

-white solid  
from drum

DATE: 5-29-86

PARAMETERS

LAB NO.

HW 1869

Volatile Organic Compounds mg/kg

<1

pH

(100%)

9.5

Total

Ag

mg/kg

<20

"

As

"

<60

"

Ba

"

9900

"

Cd

"

<20

"

Cr

"

<20

"

Pb

"

<50

"

Se

"

<100

EP

Ag

ug/L

<100

"

As

"

<300

"

Ba

"

1580

"

Cd

"

<100

"

Cr

"

<100

"

Pb

"

<250

"

Se

"

<500

Base Neutral Organic Compounds mg/kg

<10

RECEIVED

REMEDIAL ACTIONS UNIT

# GEORGIA ENVIRONMENTAL PROTECTION DIVISION

## LABORATORY REPORT

HRS Reference #1  
p.3 of 16

SAMPLE  
DATE:

11/21/85

PROJECT:

Georgia Pacific - Savannah

COLLECTOR:

Walker

DATE

REC'D

11-22-85

LABEL

TIME

REC'D

0850

REC'D

BY:

H Sanford

DEL

BY:

Walker

Harold Sanford  
LABORATORY MANAGER

HW LOC NO.

1633

1635

GPW-1

GPW-2

ground water

ground water

shallow well/  
area 1

shallow well/  
area 2

DATE: 12-11-85

PARAMETERS

LAB NO.

HW 1633

HW 1635

Volatile organic compounds w/P

<1

<1

TOTAL

Ag

49/L

<20

<20

"

As

"

50

450

"

Ba

"

70

525

"

Cd

"

<10

<10

"

Cr

"

<10

145

"

Pb

"

<20

145

"

Se

"

<50

<50

DISSOLVED

Ag

49/L

<20

<20

"

As

"

<25

<25

"

Ba

"

45

<10

"

Cd

"

<10

<10

"

Cr

"

<10

<10

"

Pb

"

<20

<20

"

Se

"

<50

<50

DEC 13 1985

REMARKS:

REMEDIAL ACTIONS UNIT

# GEORGIA ENVIRONMENTAL PROTECTION DIVISION

LABORATORY REPORT

HRS Reference #1

p.4 of .16

SAMPLE

DATE: 11/21/85

PROJECT: Georgia Pacific - Savannah

COLLECTOR: Walker

DATE

REC'D 11-22-85

LABEL

TIME

REC'D 0850

REC'D

BY: H. Sanford

DEL

BY: Walker

Harold Sanford  
LABORATORY MANAGER

HW LOG NO.

1632

1634

1636

GP-1

GP-2

GP-3

Soil

Soil

Soil

background

composite  
area 1

composite  
area 2

DATE: 12-11-85

PARAMETERS

LAB NO.

HW 1632

HW 1634

HW 1636

Toluene

mg/kg

<1

32,000

<1

Methyl Isobutyl Ketone

"

<1

26,000

<1

TOTAL

Ag

49/L

<20

<20

<100

"

As

"

<30

<30

<150

"

Ba

"

80

350

1820

"

Cd

"

<10

<10

<50

"

Cr

"

<10

<10

<50

"

Pb

"

<20

<20

<15

"

Se

"

<50

<50

<250

RECEIVED

DEC 13 1985

REMARKS:

REMEDIAL ACTIONS UNIT



**SAVANNAH LABORATORIES  
AND ENVIRONMENTAL SERVICES, INC.**  
P.O. Box 13842 • Savannah, Ga. 31416-0842  
912/354-7858

James W. Andrews, Ph.D.  
President  
Janette M. Davis  
Chief Chemist, V.P.

LOG NO: 85-0772

Received: 21 NOV 85  
Reported: 20 DEC 85

Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , WATER SAMPLES		
0772-1	#7 upstream near drum site of Area #1		
0772-2	Well #5 from drum site of Area #2		
PARAMETER		0772-1	0772-2
Arsenic, mg/l		0.03	<0.01
Barium, mg/l		0.085	0.068
Cadmium, mg/l		<0.01	<0.01
Chromium, mg/l		<0.05	<0.05
Lead, mg/l		0.03	<0.01
Selenium, mg/l		<0.05	<0.05
Silver, mg/l		<0.05	<0.05
Arsenic (Dissolved), mg/l		<0.01	<0.01
Barium (Dissolved), mg/l		<0.05	<0.05
Cadmium (Dissolved), mg/l		<0.01	<0.01
Chromium (Dissolved), mg/l		<0.05	<0.05
Lead (Dissolved), mg/l		<0.01	<0.01
Selenium (Dissolved), mg/l		<0.05	<0.05
Silver (Dissolved), mg/l		<0.05	<0.05

*Note - samples were splits of EPA samples*

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AND ENVIRONMENTAL SERVICES, INC.**  
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912/354-7858

James W. Andrews, Ph.D.  
President  
Janette M. Davis  
Chief Chemist, VP



LOG NO: 85-0772

Received: 21 NOV 85  
Reported: 20 DEC 85

Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES			
0772-3	GP-1 Background Soil			
0772-4	GP-2 soil cmpos/drum site/MW#7/Area #1			
0772-5	GP-3 soil cmpos/drum site/MW#5/Area #2			
PARAMETER		0772-3	0772-4	0772-5
Arsenic, mg/kg		88	1800	550
Barium, mg/kg		88	3.9	4.4
Cadmium, mg/kg		<0.059	1.7	0.59
Chromium, mg/kg		7.1	3.6	41
Lead, mg/kg		12	59	80
Selenium, mg/kg		<29	<29	<33
Silver, mg/kg		<2.9	<2.9	<3.3

*Note - Samples were splits of EPO soil samples*



James W. Andrews, Ph.D.  
President

Janette M. Davis  
Vice-President

**SAVANNAH LABORATORIES**  
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(912) 354-7858



LOG NO: 86-0821

Received: 11 APR 86

Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES				
0821-1	Site #1 - 10 - Savannah Plant <i>area 1</i>				
0821-2	Site #1 - 11 - Savannah Plant "				
0821-3	Site #1 - 12 - Savannah Plant "				
0821-4	Site #1 - 13 - Savannah Plant "				
0821-5	Site #1 - 14 - Savannah Plant "				
PARAMETER	0821-1	0821-2	1-3	0821-4	0821-5
Arsenic, mg/kg	7.4	8.1	15	14	6.3
Barium, mg/kg	130	550	830	600	82
Cadmium, mg/kg	0.10	0.16	0.10	0.38	0.06
Chromium, mg/kg	<1.3	6.3	13	62	16
Lead, mg/kg	15	31	26	76	23
Mercury, mg/kg	<0.02	0.10	0.10	0.40	0.10
Selenium, mg/kg	<1	<2	<1	<2	<1
Silver, mg/kg	<1	<2	<1	<2	<1

Methods: SW846

James W. Andrews, Ph.D.  
President

Janette M. Davis  
Vice-President

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LOG NO: 86-0821

Received: 11 APR 86

Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES				
0821-6	Site #1 - 15 - Savannah Plant <i>area 1</i>				
0821-7	Site #1 - 16 - Savannah Plant "				
0821-8	Site #1 - 17 - Savannah Plant "				
0821-9	Site #1 - 18 - Savannah Plant "				
0821-10	Site #1 - 19 - Savannah Plant "				
PARAMETER	0821-6	0821-7	0821-8	0821-9	0821-10
Arsenic, mg/kg	3.9	9.1	8.2	3.5	6.3
Barium, mg/kg	95	1100	740	260	800
Cadmium, mg/kg	0.06	0.34	0.18	0.63	0.44
Chromium, mg/kg	<1.5	36	29	<1.9	20
Lead, mg/kg	12	43	36	20	30
Mercury, mg/kg	<0.03	0.20	0.06	0.05	0.06
Selenium, mg/kg	<2	<1	<2	<2	<1
Silver, mg/kg	<2	<1	<2	<2	<1

Methods: SW846

Thomas L. Stephens  
Laboratory Director

James W. Andrews, Ph.D.  
President

Janette M. Davis  
Vice-President

**SAVANNAH LABORATORIES**  
**AND ENVIRONMENTAL SERVICES, INC.**  
**TALLAHASSEE DIVISION**  
P. O. Box 13056 • Tallahassee, FL 32317-3056  
2820 Industrial Plaza Blvd. (32301)  
(904) 878-3994



LOG NO: 86-0821

Received: 11 APR 86

Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES				
0821-11	Site #1 - 20 - Savannah Plant area 1				
0821-12	Site #1 - 21 - Savannah Plant area 1				
0821-13	Site #2 - 34 - Savannah Plant area 5				
0821-14	Site #2 - 35 - Savannah Plant "				
0821-15	Site #2 - 36 - Savannah Plant "				
PARAMETER	0821-11	0821-12	0821-13	0821-14	0821-15
Arsenic, mg/kg	3.7	2.2	15	11	9.1
Barium, mg/kg	22	940	690	3400	150
Cadmium, mg/kg	0.04	0.07	0.68	0.73	0.61
Chromium, mg/kg	<0.9	40	16	17	19
Lead, mg/kg	6.3	20	23	25	24
Mercury, mg/kg	0.03	0.30	0.2	0.2	0.4
Selenium, mg/kg	<1	<2	<2	<1	<1
Silver, mg/kg	<1	<2	<2	<1	<1

Methods: SW846

James W. Andrews, Ph.D.  
President

Janette M. Davis  
Vice-President

**SAVANNAH LABORATORIES  
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(912) 354-7858



LOG NO: 86-0821

Received: 11 APR 86

Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO SAMPLE DESCRIPTION , SOIL SAMPLES

0821-16	Site #2 - 37 - Savannah Plant <i>xxx 2</i>
0821-17	Site #2 - 38 - Savannah Plant "
0821-18	Site #2 - 39 - Savannah Plant "
0821-19	Site #2 - 40 - Savannah Plant "
0821-20	Site #2 - 41 - Savannah Plant "

PARAMETER	0821-16	0821-17	0821-18	0821-19	0821-20
Arsenic, mg/kg	13	6.5	5.1	11	4.1
Barium, mg/kg	430	570	660	1000	3500
Cadmium, mg/kg	0.56	0.48	0.15	1.2	1.5
Chromium, mg/kg	20	27	15	31	33
Lead, mg/kg	68	23	13	38	1300
Mercury, mg/kg	0.30	0.02	0.2	0.3	0.1
Selenium, mg/kg	<3	<2	<1	<2	<1
Silver, mg/kg	<3	<2	<1	<2	<1

Methods: SW846

James W. Andrews, Ph.D.  
President

Janette M. Davis  
Vice-President

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Whitfield Avenue at Shipyard Road (31406)  
(912) 354-7858



LOG NO: 86-0821


Received: 11 APR 86

Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES				
0821-21	Site #2 - 42 - Savannah Plant area 2				
0821-22	Site #2 - 43 - Savannah Plant "				
0821-23	Site #2 - 44 - Savannah Plant "				
0821-24	Site #2 - 45 - Savannah Plant "				
PARAMETER		0821-21	0821-22	0821-23	0821-24
Arsenic, mg/kg		9.3	8.5	6.1	22
Barium, mg/kg		2100	840	1400	4700
Cadmium, mg/kg		0.78	0.55	1.8	1.0
Chromium, mg/kg		51	18	16	23
Lead, mg/kg		41	28	50	42
Mercury, mg/kg		0.49	<0.04	0.03	0.20
Selenium, mg/kg		<2	<3	<2	<2
Silver, mg/kg		<2	<3	<2	<2

Methods: SW846

  
Janette M. Davis

James W. Andrews, Ph.D.  
President

Janette M. Davis  
Vice-President

**SAVANNAH LABORATORIES**  
**AND ENVIRONMENTAL SERVICES, INC.**  
P. O. Box 13842 • Savannah, GA 31416-0842  
Whitfield Avenue at Shipyard Road (31406)  
(912) 354-7858



LOG NO: 00-0821

Received: 11 APR 86

Mr. Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES				
0821-1	#1 - Savannah Plant				
0821-2	#7 - Savannah Plant				
0821-3	#8 - Savannah Plant				
0821-4	#9 - Savannah Plant				
0821-5	#23 - Savannah Plant				
PARAMETER	0821-1	0821-2	0821-3	0821-4	0821-5
Arsenic, mg/kg	32	9.6	1.5	1.4	3.0
Chromium, mg/kg	44	7.5	11	4.2	4.8
Lead, mg/kg	16	4.3	16	16	8.0
Mercury, mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03

Methods: EPA SW-846

James W. Andrews, Ph.D.  
President

Janette M. Davis  
Vice-President

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LOG NO: 00-0821

Received: 11 APR 86

Mr. Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

**REPORT OF ANALYTICAL RESULTS**

**LOG NO      SAMPLE DESCRIPTION , SOIL SAMPLES**

0821-6      #24 - Savannah Plant  
0821-7      #25 - Savannah Plant  
0821-8      #46 - Savannah Plant  
0821-9      #47 - Savannah Plant  
0821-10      #48 - Savannah Plant

PARAMETER	0821-6	0821-7	0821-8	0821-9	0821-10
Arsenic, mg/kg	7.3	2.5	26	21	10
Chromium, mg/kg	25	26	53	21	10
Lead, mg/kg	24	45	37	29	8.0
Mercury, mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03

Methods: EPA SW-846

Whitfield Avenue at Shipyard Road (31406)  
(912) 354-7858

LOG NO: 00-0821

Received: 11 APR 86

Mr. Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO      SAMPLE DESCRIPTION , SOIL SAMPLES

0821-11      #49 - Savannah Plant  
0821-12      #50 - Savannah Plant

PARAMETER	0821-11	0821-12
Arsenic, mg/kg	24	25
Chromium, mg/kg	16	22
Lead, mg/kg	6.6	9.4
Mercury, mg/kg	<0.03	<0.03

Methods: EPA SW-846

  
Janette M. Davis



Highway Avenue at Simpson Road (51400)  
(912) 354-7858

LOG NO: 86-1181

Received: 21 MAY 86

Mr. Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO      SAMPLE DESCRIPTION , SOIL SAMPLES

1181-1      #13 (4' - 5')  
1181-2      #13 (9' - 10')  
1181-3      #16 (4' - 5')  
1181-4      #16 (9' - 10')  
1181-5      #41 (4' - 5')

PARAMETER	1181-1	1181-2	1181-3	1181-4	1181-5
Lead, mg/kg	4.7	7.2	8.7	5.7	9.5
Mercury, mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03

Methods: EPA SW-846

James W. Andrews, Ph.D.  
President

Janette M. Davis  
Vice-President

**SAVANNAH LABORATORIES  
AND ENVIRONMENTAL SERVICES, INC.**

P. O. Box 13842 • Savannah, GA 31416-0842  
Whitfield Avenue at Shipyard Road (31406)  
(912) 354-7858



LOG NO: 86-1181

Received: 21 MAY 86

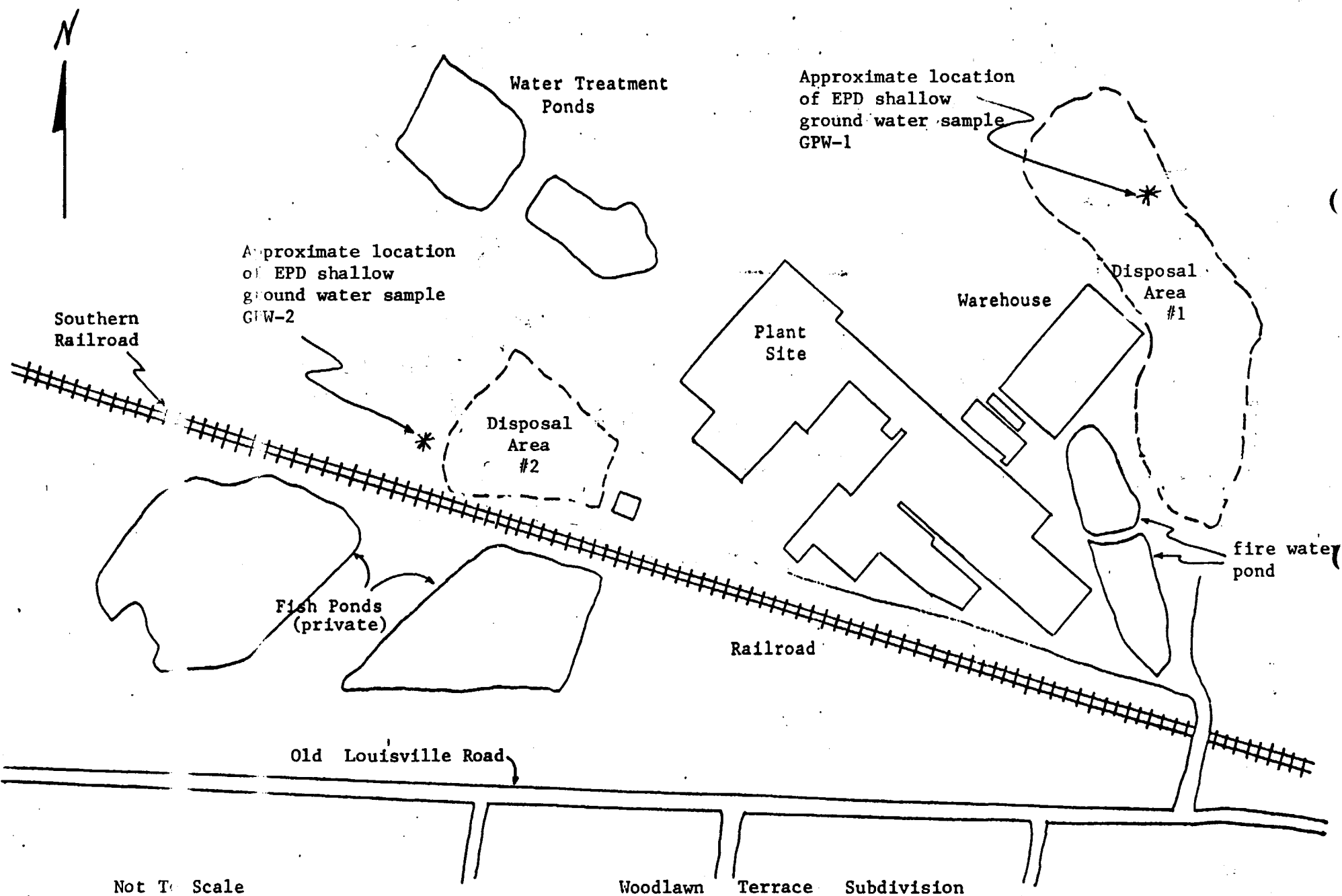
Mr. Tom Stevens  
Georgia-Pacific Corporation  
133 Peachtree St., NE  
Atlanta, GA 30303

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES
1181-6	#41 (9' - 10')
PARAMETER	1181-6
Lead, mg/kg	20
Mercury, mg/kg	<0.03

Methods: EPA SW-846

Figure 2: Site Sketch Map - Georgia Pacific Corp. Savannah



RECORD OF TELEPHONIC CONVERSATION

Site Investigation Program

Routing: ST

Date: 7/21/86

Time: 2:44 a.m./(p.m.)

File: Georgia Pacific Corp. Savannah

Party Spoken To: Mr. Leon Stephenson

Title: Plant Superintendent

Agency/Company: Georgia Pacific Corp.

Address: P.O. Box 367, Old Louisville Rd. City: Savannah

Telephone Number: (912) - State/Zip: Georgia 31408

Subject (file name): \_\_\_\_\_

Summary of Call: A conference call between Rick Harder (lawyer Ge. Pac.),  
Leon Stephenson (Plant Sup. Ge. Pac.), Tom Stevens (Env. Eng. Ge. Pac.) and Steve  
Walker (Env. Spec. EPD). The call was arranged at the request  
of Georgia Pacific so that T. could ask Leon Stephenson  
about the site. Mr. Stephenson stated that 2, 3 or 4 drums <sup>per day</sup> of  
liquid or sludge wastes were generated 1959-1965. This drummed  
waste was simply poured out onto the ground in areas 1 and 2 according  
to Mr. Stephenson. He also stated that no sealed drums  
(Full or partly full) were buried in area 1 or area 2.

Actions Required: \_\_\_\_\_

Signature: Steve Walker 7/21/86

Follow-up Responses/Additional Comments: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## RECORD OF TELEPHONIC CONVERSATION

## Site Investigation Program

Routing: Mike Allred Mike Allred 8-4-86 Date: 8/1/86  
S.I., H.A.S. Time: 9:55 a.m./(p.m.)  
File: Georgia Pacific Corp. Savannah  
Party Spoken To: Mr. Paul N. Clawson Title: Prof. Geologist  
Agency/Company: None

Address: \_\_\_\_\_ City: Savannah  
<sup>Brother-in-law</sup>  
Telephone Number: (305) 491 - 4538 State/Zip: Georgia

Subject (file name): Georgia Pacific Corp. Savannah

Summary of Call: I called Mr. Clawson in Fort Lauderdale, Fla.  
to attempt to gather information on shallow wells near the  
site (his wife stated that she thought that he was the only one in  
Sav who put in shallow wells). I asked Mr. Clawson if he knew of  
any wells, <25' feet or so that are used for drinking within  
3 miles of the Georgia Pacific plant. Mr. Clawson said that  
he knew of the Ge. Pac. plant and that he knew of 3 private  
shallow wells within 3 miles of the plant. He stated that  
he could no longer remember the name of the residents with the  
wells. He inferred that he drilled the wells himself. (over)

Actions Required: \_\_\_\_\_

Signature: Don Walker 8/1/86

Follow-up Responses/Additional Comments: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

RECORD OF TELEPHONIC CONVERSATION

Site Investigation Program

Routing: HAS

Date: 7/29/86

Time: 8:05 (a.m.)/p.m.

File: Georgia Pacific Corp Savannah

Party Spoken To: Mr. Charles Lindsey

Title: Env. Health Prog. Specialist

Agency/Company: -for the Effingham/Chatham County Health Departments

Address: \_\_\_\_\_ City: Savannah

Telephone Number: (912) 356-2160 State/Zip: Georgia

Subject (file name): Georgia Pacific Corp. Savannah

Summary of Call: I called to find out if the subject health dept. was aware of any shallow wells ( $\pm$  50' deep) in Chatham County. Mr. Lindsey stated that he has been working for the health dept. for about 28 years and in all that time, he has seen only a few shallow wells. He said that even though it is unlikely that anyone in the county is using a shallow well for drinking water, the possibility does exist.

Actions Required: \_\_\_\_\_

Signature: Steve Walen 7/29/86.

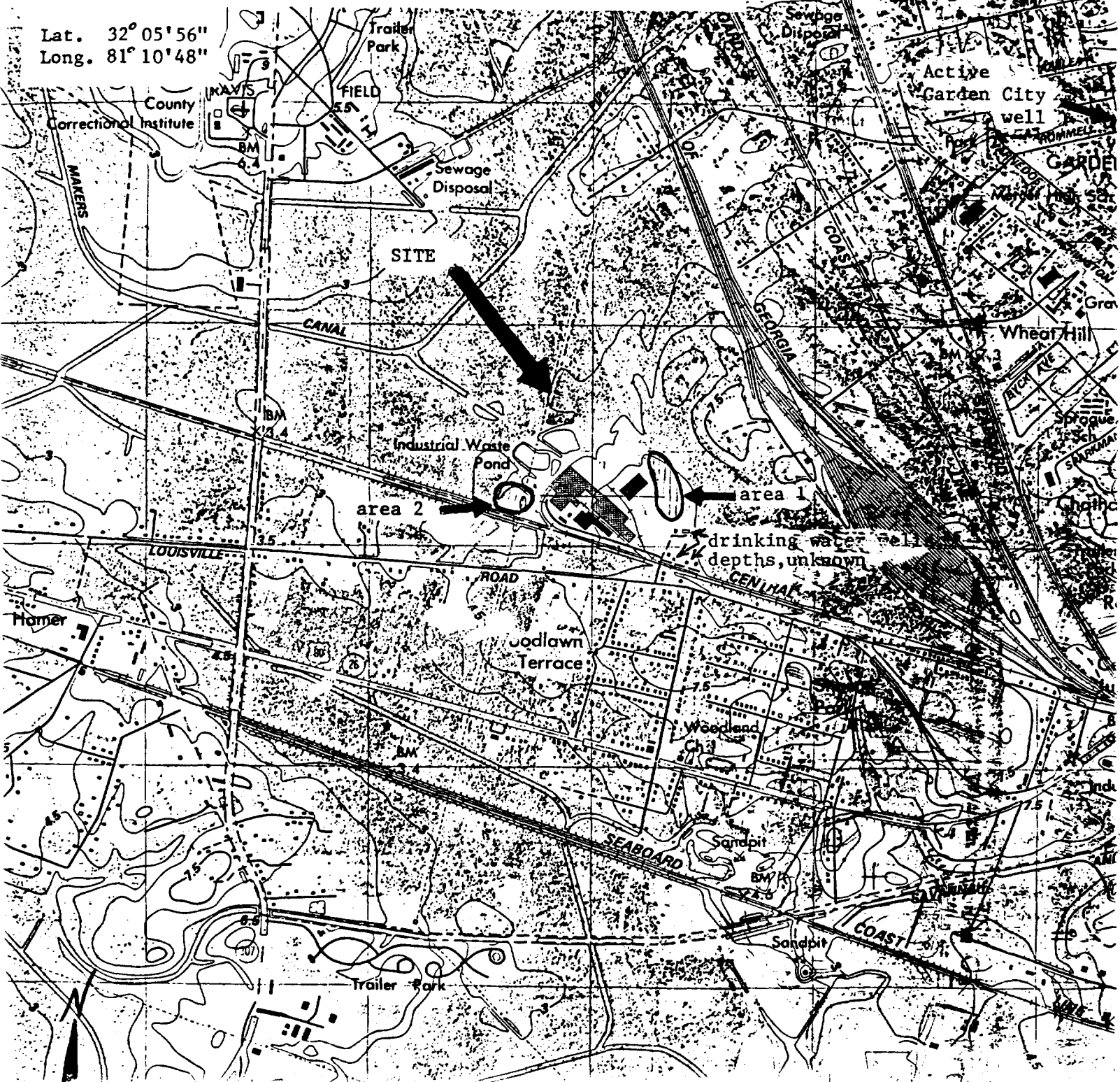
Follow-up Responses/Additional Comments: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Figure 1: Site Location Map — Georgia Pacific Corp. Savannah  
GAD990741332

Lat. 32° 05' 56"  
Long. 81° 10' 48"

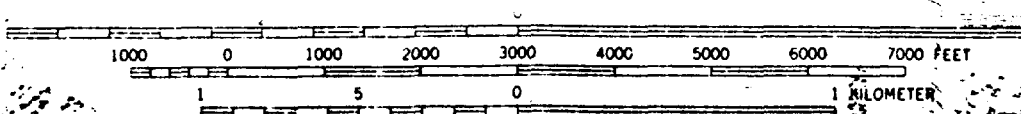
Appendix A



GARDEN CITY QUADRANGLE  
GEORGIA—CHATHAM CO. 1980

7.5 MINUTE SERIES ORTHOPHOTOMAP (TOPOGRAPHIC)

QUADRANGLE LOCATION



CONTOUR INTERVAL 1.5 METERS

## RECORD OF TELEPHONIC CONVERSATION

## Site Investigation Program

Routing: HRSDate: 7/29/86Time: 1:27 a.m. (p.m.)File: Georgia Pacific Corp. SavannahParty Spoken To: Mr. Jim ShirleyTitle: Chatham Co. Extension AgentAgency/Company: Georgia Agricultural Extension ServiceAddress: \_\_\_\_\_ City: SavannahTelephone Number: (912) 944 - 2291 State/Zip: GeorgiaSubject (file name): Georgia Pacific Corp. Savannah

Summary of Call: I called Mr. Shirley to inquire 1) if Pipe  
Maker's Canal is used for irrigation and 2) if he is aware  
of any shallow wells <sup>(250' deep)</sup> which are used for irrigation in the  
County. Mr. Shirley stated that he is not aware of  
any irrigation from Pipe Maker's Canal or from ? shallow  
wells in Chatham County.

Actions Required: \_\_\_\_\_

Signature: Dune Walker 7/29/86

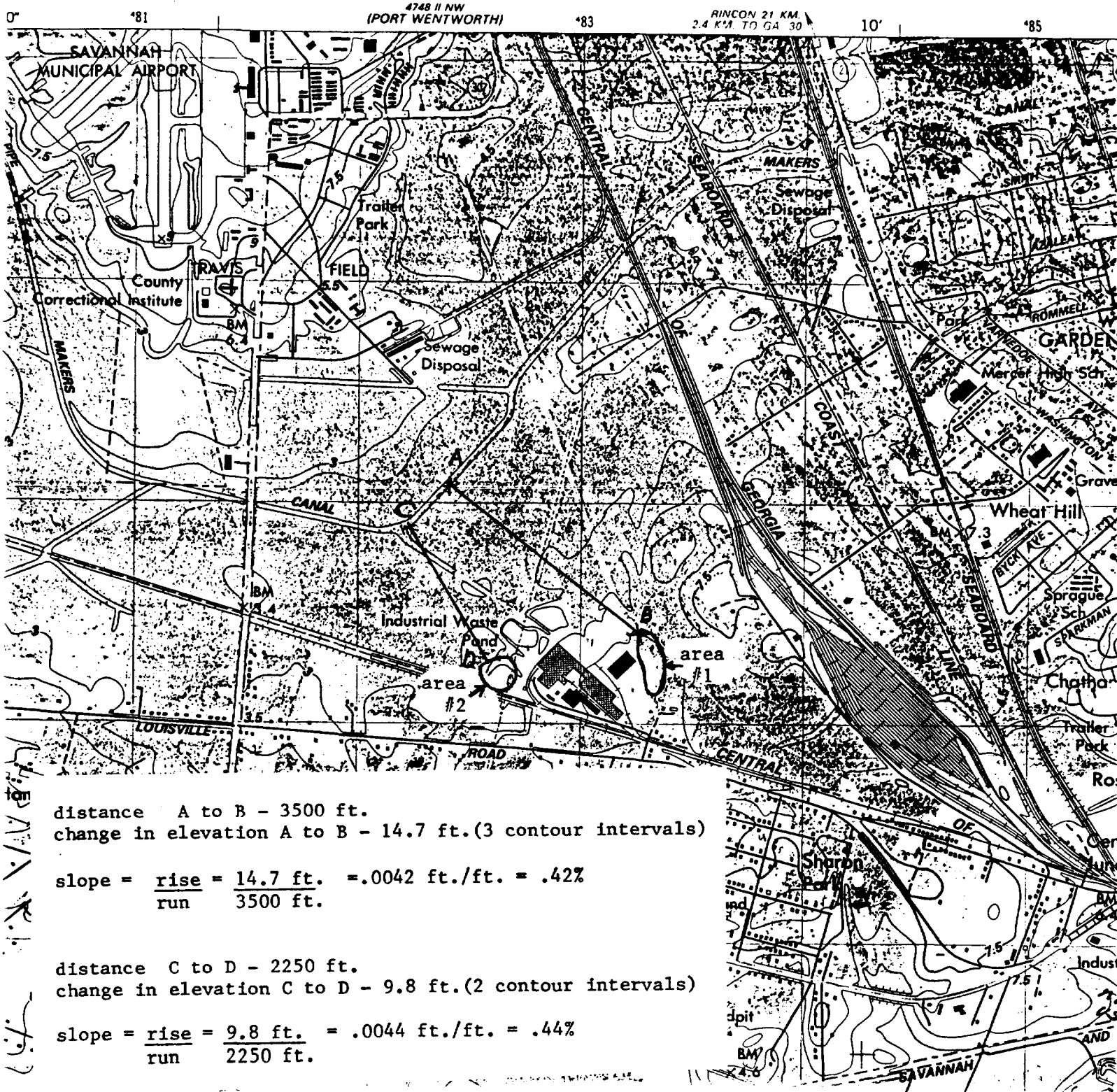
Follow-up Responses/Additional Comments: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



STATE OF GEORGIA  
DEPARTMENT OF NATURAL RESOURCES  
GEOLOGIC AND WATER RESOURCES DIVISION

RS Reference #9



GARDEN CITY QUADRANGLE  
GEORGIA-CHATHAM CO. 1980

7.5 MINUTE SERIES ORTHOPHOTOMAP (TOPOGRAPHIC)

SCALE 1:24,000

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER

CONTOUR INTERVAL 1.5 METERS (4.9 feet)

## RECORD OF TELEPHONIC CONVERSATION

## Site Investigation Program

Routing: Mike Allred Mike Allred 7/28/86 Date: 7/28/86  
ST Time: 2:58 a.m./p.m. (p.m.)  
File: Georgia Pacific Corp. Savannah  
Party Spoken To: Mr. Bill Haley Title: Conservation Corporal  
Agency/Company: Georgia Game and Fish Division, DWR  
Address: \_\_\_\_\_ City: Richmond Hill  
Telephone Number: (912) 925-3953 State/Zip: Georgia

Subject (file name): Georgia Pacific Corp. Savannah  
Summary of Call: I called Mr. Haley to find out if anyone  
fishes on Pipe Maker's Canal. Mr. Haley said that  
"every once in a while" people will fish at the Hwy 17  
bridge. He stated that people also fish at the Hwy 307  
bridge over the canal.

Actions Required: \_\_\_\_\_

Signature: Steve Walker 7/28/86

Follow-up Responses/Additional Comments: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

RECORD OF TELEPHONIC CONVERSATION

Site Investigation Program

Routing: \_\_\_\_\_

Date: 7/14/86

Time: 320 a.m. (p.m.)

File: Georgia Pacific Corp. Savannah

Party Spoken To: Mike Milan

Title: Petty Officer

Agency/Company: U.S. Coast Guard

Address: \_\_\_\_\_

City: Savannah

Telephone Number: (912) 944 - 4353

State/Zip: Georgia

Subject (file name): Georgia Pacific Corp. Savannah

Summary of Call: I called Mr. Milan to inquire as to the effect  
of tidal action on Pipe Maker's Canal near the site.  
Mr. Milan said that he was familiar with the canal and  
that tidal action is probable as far up stream as I-95. The  
site is between I-95 and the Savannah River.

Actions Required: \_\_\_\_\_

Signature: Steve Walker 7/14/86

Follow-up Responses/Additional Comments: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Figure 3: Map Showing 3 and 5 Mile Radii of the Georgia Pacific Plant.

Appendix A



GEORGIA'S PROTECTED WILDLIFE

PREPARED BY:

Ron R. Odom

Jerry L. McCollum

Mary Anne Neville

David R. Ettman

Game and Fish Division  
Endangered Wildlife Program  
Route 2  
Social Circle, Georgia 30279

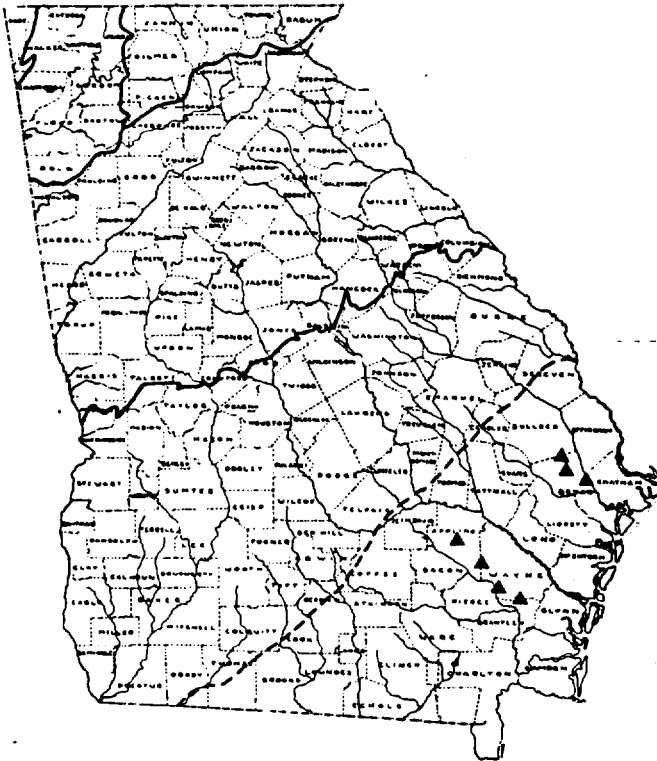
September 15, 1977

SHORTNOSE STURGEON

Order Acipenseriformes

Acipenser brevirostrum (Lesueur)

Family Acipenseridae



(REFER TO COLOR PHOTO PAGE 2)

---

Common Name: Shortnose Sturgeon.

Characteristics: The Shortnose Sturgeon seldom exceeds a length of more than .92 m. (3 ft.). Acipenser brevirostrum can be distinguished from the Lake Sturgeon Acipenser oxyrinchus as follows: the Shortnosed Sturgeon has a wider mouth, blackish vs. pale viscera, a shorter and blunter snout, almost complete absence of post dorsal shields, preanal shield arranged in a single (vs. double) row, a pigmented (vs. whitish) anal fin, and a slightly higher total gillraker count (22-29, average 25.5 vs. 17-27, average 21.6). The most conspicuous difference is in the pigmentation of the lateral scutes, which are much paler than the background of the body in Acipenser brevirostrum, but are the same shade as the background in the Lake Sturgeon (Gilbert, 1976).

Life History: The species is a bottom feeder, consuming invertebrates and plant material mixed with mud (Gilbert, 1976).

Preferred Habitat: Atlantic seaboard rivers.

Status: The Shortnose Sturgeon is currently listed as endangered on the Federal Endangered Species List and Georgia's Protected Species List.

Population Trends: Populations are thought to be rapidly declining and the species approaching extinction.

Estimated Populations: Unknown but believed to be perilously low.

Reproduction: Spawning takes place in rivers during early spring (Gilbert, 1976). Reproductive data is scarce.

Reason for Decline: Pollution and overfishing are believed to be the major factors for decline.

Protective Measures Taken: Recognized as endangered under the Endangered Wildlife Act of 1973. Nationally protected under the Endangered Species Act of 1973. Shad fishing regulations in Georgia require the release of all sturgeons taken in shad nets. Atlantic Sturgeon may be legally harvested in Georgia, but net size regulations insure selection against the shortnose and small Atlantic Sturgeon.

Present Distribution: Unknown. Thought to exist in the Altamaha River (Dahlberg and Scott, 1971) and the Savannah River (Carl Hall, Pers. Comm., 1977). The species may occur in all major coastal rivers in Georgia.

Past Distribution: Atlantic seaboard rivers from New Brunswick to Florida.

Proposed Management Measures: Status surveys are badly needed. In addition, life histories, and habitat requirements should be researched. Determination of critical habitat should be made and public education programs developed.

Number in Captivity: None known.

## RECORD OF TELEPHONIC CONVERSATION

## Site Investigation Program

Routing: HRSDate: 7/31/86Time: 2:35 a.m./p.m.File: Georgia Pacific Corp. SavannahParty Spoken To: Mr. William WeilTitle: Operations SuperintendentAgency/Company: Surface Water Div., Savannah Water Dept.Address: \_\_\_\_\_ City: SavannahTelephone Number: (912) 964-0698 State/Zip: GeorgiaSubject (file name): Georgia Pacific Corp. Savannah

Summary of Call: I called Mr. Weil to find out if Pipe Maker's Canal on the Savannah River downstream from the canal is used by the Savannah Water Dept. Mr. Weil stated that the Sav. Water Dept. does not have drinking water intakes on the Savannah River below pipe Maker's Canal or in the canal itself. When asked if anyone uses the subject portions of these surface waters for drinking, Mr. Weil said no.

Actions Required: \_\_\_\_\_

Signature: Steve Walker 7/30/86

Follow-up Responses/Additional Comments: \_\_\_\_\_

Signature: \_\_\_\_\_



# Georgia Department of Natural Resources

205 Butler Street, S.E., Floyd Towers East, Atlanta, Georgia 30334

J. Leonard Ledbetter, Commissioner  
Harold F. Reheis, Assistant Director  
Environmental Protection Division  
(404) 656-4713

July 31, 1986

## MEMORANDUM

To : File *MA*  
Thru: Mike Allred, Environmental Specialist, Site Assessment Unit  
From: Steve Walker, Environmental Specialist, Site Assessment Unit *SW*  
Subject: Georgia Pacific Corp. Savannah - personal observations made while  
at the site on 11/21/85.

comments: While at the site on November 21, 1985, I noticed that a security guard was present at the entrance gate to the facility. I later observed no fence or guard between the Georgia Pacific property and residences adjacent to the southern portion of disposal area 1 (see Figure 1 attached).

File: Georgia Pacific Corp. Savannah (B)



REGION: 04  
STATE : GA

U.S. ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE  
C E R C L I S V 1.2

PAGE: 14  
RUN DATE: 12/27/85  
RUN TIME: 17:48:44

M.2 - SITE MAINTENANCE FORM

\* ACTION: \_

EPA ID : GAD990741332

SITE NAME: GEORGIA-PACIFIC CORP SAVANNAH SOURCE: H \* \_

STREET : OLD LOUISVILLE RD CONG DIST: 01 \* \_

CITY : SAVANNAH ZIP: 31498 \* \_

CNTY NAME: CHATHAM CNTY CODE : 051 \* \_

LATITUDE : 32/06/03.0 LONGITUDE : 081/11/12.0 \* \_/\_/\_

LL-SOURCE: G LL-ACCURACY: \* \_

SMSA : HYDRO UNIT: \* \_

INVENTORY IND: Y REMEDIAL IND: Y REMOVAL IND: N FED FAC IND: N \* \_

NPL IND: N NPL LISTING DATE: NPL DELISTING DATE: \* \_/\_/\_

SITE/SPILL IDS: \* \_ \_ \_ \_

RPM NAME: RPM PHONE: - - \* \_

SITE CLASSIFICATION: SITE APPROACH: \* \_

DIOXIN TIER: REG FLD1: REG FLD2: 7 \* \_

RESP TERM: PENDING ( ) NO FURTHER ACTION ( ) \* PENDING ( ) NO FURTHER ACTION ( )

ENF DISP: NO VIABLE RESP PARTY ( ) VOLUNTARY RESPONSE ( ) \* \_

ENFORCED RESPONSE ( ) COST RECOVERY ( ) \* \_

SITE DESCRIPTION:

\* \_

\* \_

\* \_

\* \_

REGION: 04  
STATE : GA

U.S. ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE  
C E R C L I S V 1.2

PAGE: 15  
RUN DATE: 12/27/85  
RUN TIME: 17:48:44

M.2 - PROGRAM MAINTENANCE FORM

SITE: GEORGIA-PACIFIC CORP SAVANNAH

EPA ID: GAD990741332 PROGRAM CODE: H01 PROGRAM TYPE:

PROGRAM QUALIFIER: ALIAS LINK :

PROGRAM NAME: SITE EVALUATION

DESCRIPTION:

\* ACTION: \_

\* \_ \*

\* \_ \*

\* \_ \*

\* \_ \*

\* \_ \*

\* \_ \*

\* \_ \*

REGION: 04  
STATE : GA

U.S. ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE  
C E R C L I S V 1.2

PAGE: 16  
RUN DATE: 12/27/85  
RUN TIME: 17:48:44

M.2 - EVENT MAINTENANCE FORM

\* ACTION: \_

SITE: GEORGIA-PACIFIC CORP SAVANNAH  
PROGRAM: SITE EVALUATION

EPA ID: GAD990741332 PROGRAM CODE: H01

EVENT TYPE: DS1

FMS CODE: EVENT QUALIFIER :

EVENT LEAD: E

EVENT NAME: DISCOVERY

STATUS:

DESCRIPTION:

\* \_ \_ \_ \_ \_  
\* \_ \_ \_ \_ \_  
\* \_ \_ \_ \_ \_  
\* \_ \_ \_ \_ \_  
\* \_ \_ \_ \_ \_

ORIGINAL

CURRENT

ACTUAL

START:

START:

START:

\* \_/\_/\_/\_ \_/\_/\_/\_ \_/\_/\_/\_ \*

COMP :

COMP :

COMP : 08/01/80

\* \_/\_/\_/\_ \_/\_/\_/\_ \_/\_/\_/\_ \*

HQ COMMENT:

\* \_ \_ \_ \_ \_

RG COMMENT:

\* \_ \_ \_ \_ \_

COOP AGR #

AMENDMENT #

STATUS

STATE %

0

\* \_ \_ \_ \_ \_

REGION: 04  
STATE : GA

U.S. ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE  
C E R C L I S V 1.2

PAGE: 17  
RUN DATE: 12/27/85  
RUN TIME: 17:48:44

M.2 - EVENT MAINTENANCE FORM

SITE: GEORGIA-PACIFIC CORP SAVANNAH  
PROGRAM: SITE EVALUATION

EPA ID: GAD990741332 PROGRAM CODE: H01

FMS CODE: EVENT QUALIFIER :

EVENT NAME: PRELIMINARY ASSESSMENT

DESCRIPTION:

EVENT TYPE: PA1

EVENT LEAD: S

STATUS:

\* ACTION: \_

\* \_ \_ \_ \_ \_  
\* \_ \_ \_ \_ \_  
\* \_ \_ \_ \_ \_  
\* \_ \_ \_ \_ \_  
\* \_ \_ \_ \_ \_

ORIGINAL

CURRENT

ACTUAL

START:	START:	START: 06/10/85	* _/_/_	_/_/_	_/_/_
COMP :	COMP :	COMP : 12/10/85	* _/_/_	_/_/_	_/_/_

HQ COMMENT:

\* \_ \_ \_ \_ \_  
\* \_ \_ \_ \_ \_

RG COMMENT:

COOP AGR # AMENDMENT # STATUS STATE X

0

\* \_ \_ \_ \_ \_

REGION: 04  
STATE : GA

U.S. ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE  
C E R C L I S V 1.2

PAGE: 18  
RUN DATE: 12/27/85  
RUN TIME: 17:48:44

M.2 - COMMENT MAINTENANCE FORM

SITE: GEORGIA-PACIFIC CORP SAVANNAH

EPA ID: GAD990741882

COM  
NO COMMENT

ACTION

001 PART A- ON FILE

\* -

\*

PRELIMINARY ASSESSMENT COVER SHEET  
GEORGIA PACIFIC CORPORATION SAVANNAH  
SAVANNAH, GEORGIA - CHATHAM COUNTY  
GAD990741332

A. HISTORY OF SITE

The Georgia Pacific Corporation Savannah facility is located on Old Louisville Road in Savannah, Chatham County, Georgia. The Georgia Pacific Corporation acquired this facility from the General Plywood Plant Corporation in 1949. From approximately 1949 to 1956, Georgia Pacific was engaged in producing 3/4 inch birch plywood. According to plant superintendent Mr. Leon Stephenson, no waste was dumped on site before 1959. Since 1957 this facility has been manufacturing plywood and prefinished wall paneling. According to Mr. Stephenson, on site disposal of approximately three or four fifty-five gallon drums per week of wastes occurred from 1959 to 1965. These wastes consisted of a mixture of solvents, lacquer paint and base coat materials that were derived from the production of prefinished wall paneling. After 1965 these wastes were mixed in a wood fired boiler and burned as fuel. Since 1980 all solvents and sealers and stains used have been water based materials and are considered non-hazardous. Georgia Pacific has withdrawn its Part A permit and is presently classified as a Small Quantity Generator by the Georgia EPD.

B. NATURE OF HAZARDOUS MATERIALS

Unknown amounts of solvents and paint wastes have been dumped onto the ground at two locations on site (see topographic map).

C. DESCRIPTION OF HAZARDOUS CONDITIONS, INCIDENTS, PERMIT VIOLATIONS

No known permit violations or hazardous incidents have been noted heretofore at the Georgia Pacific Savannah Facility.

D. ROUTES FOR CONTAMINATION

There is a potential for local ground water contamination of the surficial ground water since open dumping of solvents occurred on site from 1959 to 1965.

E. POSSIBLE AFFECTED POPULATION AND RESOURCES

The nearby residents of Woodlawn Terrace are supplied by a municipal well system located in Garden City, Georgia. There are local drinking water wells located approximately 1 to 1 1/2 miles west of the Georgia Pacific facility.



F. RECOMMENDATIONS AND JUSTIFICATIONS

A "low priority" for a Site Inspection is recommended for this facility based on the following conclusions:

Unknown quantities of lacquer based paints and solvents were disposed of on site between 1959 and 1965. A potential for soil contamination exists at the subject site. A potential for local groundwater contamination exists in the areas adjacent to the facility. Conflicting information received from Georgia Pacific personnel warrants a future inspection of this facility.

G. REFERENCE TO SUPPORTING DATA SOURCES

Telephone Conversation Memo - April 30, 1985

To: Mr. Leon Stephenson - Georgia Pacific Corporation - Savannah.

From: Jeffrey Williams - Georgia EPD

RE: Pre-RCRA disposal practices at Georgia Pacific Corp. - Savannah.

Telephone Conversation Memo - May 3, 1985

To: Mr. Larry Rodgers - Georgia EPD - Brunswick.

From: Jeffrey Williams - Georgia EPD

RE: Groundwater Supplies.

Georgia EPD "Waste Management Data Sheet"

Trip Report - By Martha Pierce - April 5, 1984.

Georgia EPD Files - Georgia Pacific Corporation - Savannah.

JMW/mcw028



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
GA D990741332

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Georgia Pacific Corporation Savannah		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER P. O. Box 367 - Old Louisville Road			
03 CITY Savannah	04 STATE GA	05 ZIP CODE 31498	06 COUNTY Chatham	07 COUNTY CODE 051	08 CONG DIST 1
09 COORDINATES LATITUDE 32° 05' 56.0" N		LONGITUDE 081° 10' 48.3" W			
10 DIRECTIONS TO SITE (Starting from nearest public road) From the intersection of Hwy. 80 and Hwy. 21 in Garden City, GA, take Hwy 80 west for approximately 1.4 miles and bear right onto the Old Louisville Road. Go approximately 1.4 miles west on Old Louisville Rd. to Oak Grove Church. GP facility is located on the right side of Oak Grove Church across RR tracks.					

III. RESPONSIBLE PARTIES

01 OWNER (If known) Georgia Pacific Corporation		02 STREET (Business, mailing, residential) 133 Peachtree Street, NE			
03 CITY Atlanta	04 STATE GA	05 ZIP CODE 30348	06 TELEPHONE NUMBER '404' 521-5080		
07 OPERATOR (If known and different from owner) Same as above		08 STREET (Business, mailing, residential)			
09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER ( )		
13 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL: _____ (Agency name) <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER: _____ (Specify) <input type="checkbox"/> G. UNKNOWN					

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)  
☒ A. RCRA 3001 DATE RECEIVED: 11/14/80 ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: \_\_\_\_/\_\_\_\_/\_\_\_\_ ☐ C. NONE  
MONTH DAY YEAR MONTH DAY YEAR

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION <input checked="" type="checkbox"/> YES DATE <u>04/15/84</u> <input type="checkbox"/> NO MONTH DAY YEAR		BY (Check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input checked="" type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: <u>GA EPD</u> (Specify)			
02 SITE STATUS (Check one) <input checked="" type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN		CONTRACTOR NAME(S): <u>TP Martha Pierce</u>			

03 YEARS OF OPERATION <u>1949</u>   <u>Present</u> BEGINNING YEAR ENDING YEAR		<input type="checkbox"/> UNKNOWN
---	--	----------------------------------

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED  
Open dumping of solvents containing lacquer paint and base coat materials occurred on site from 1959 to 1965.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Potential for soil contamination exists at two previous open dump areas located on site at this facility.

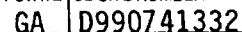
V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)  
☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☒ C. LOW (Inspection on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT Leon Stephenson		02 OF (Agency Organization) Georgia Pacific Corp. - Savannah		03 TELEPHONE NUMBER '912' 964-2230	
04 PERSON RESPONSIBLE FOR ASSESSMENT Jeff Williams <i>mw</i>		05 AGENCY DNR	06 ORGANIZATION EPD-RAU	07 TELEPHONE NUMBER '404' 656-7404	08 DATE <u>05/03/85</u> MONTH DAY YEAR

*J. Suronick*



<input type="checkbox"/> A. TOXIC	<input type="checkbox"/> E. SOLUBLE	<input type="checkbox"/> I. HIGHLY VOLATILE
<input type="checkbox"/> B. CORROSIVE	<input type="checkbox"/> F. INFECTIOUS	<input type="checkbox"/> J. EXPLOSIVE
<input type="checkbox"/> C. RADIOACTIVE	<input type="checkbox"/> G. FLAMMABLE	<input type="checkbox"/> K. REACTIVE
<input type="checkbox"/> D. PERSISTENT	X <input checked="" type="checkbox"/> H. IGNITABLE	<input type="checkbox"/> L. INCOMPATIBLE
		<input type="checkbox"/> M. NOT APPLICABLE



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
GA D990741332

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: Unknown

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

☒ POTENTIAL

☐ ALLEGED

Solvent and paint wastes were dumped on the ground and may have percolated into soil and contaminated the surficial aquifer.

01 ☐ B. SURFACE WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ C. CONTAMINATION OF AIR

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ E. DIRECT CONTACT

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☒ F. CONTAMINATION OF SOIL

03 AREA POTENTIALLY AFFECTED: 1/2  
(Acres)

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

☒ POTENTIAL

☐ ALLEGED

Two areas on site received solvent waste and paint residues from 1959 to 1965. Wastes were poured directly onto the ground

01 ☐ G. DRINKING WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ H. WORKER EXPOSURE/INJURY

03 WORKERS POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ I. POPULATION EXPOSURE/INJURY

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
GA D990741332

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

01 ☐ K. DAMAGE TO FAUNA  
04 NARRATIVE DESCRIPTION (Include name(s) of species)

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

01 ☐ L. CONTAMINATION OF FOOD CHAIN  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES  
(Spills, runoff, standing liquids, leaking drums)

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

01 ☐ N. DAMAGE TO OFFSITE PROPERTY  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

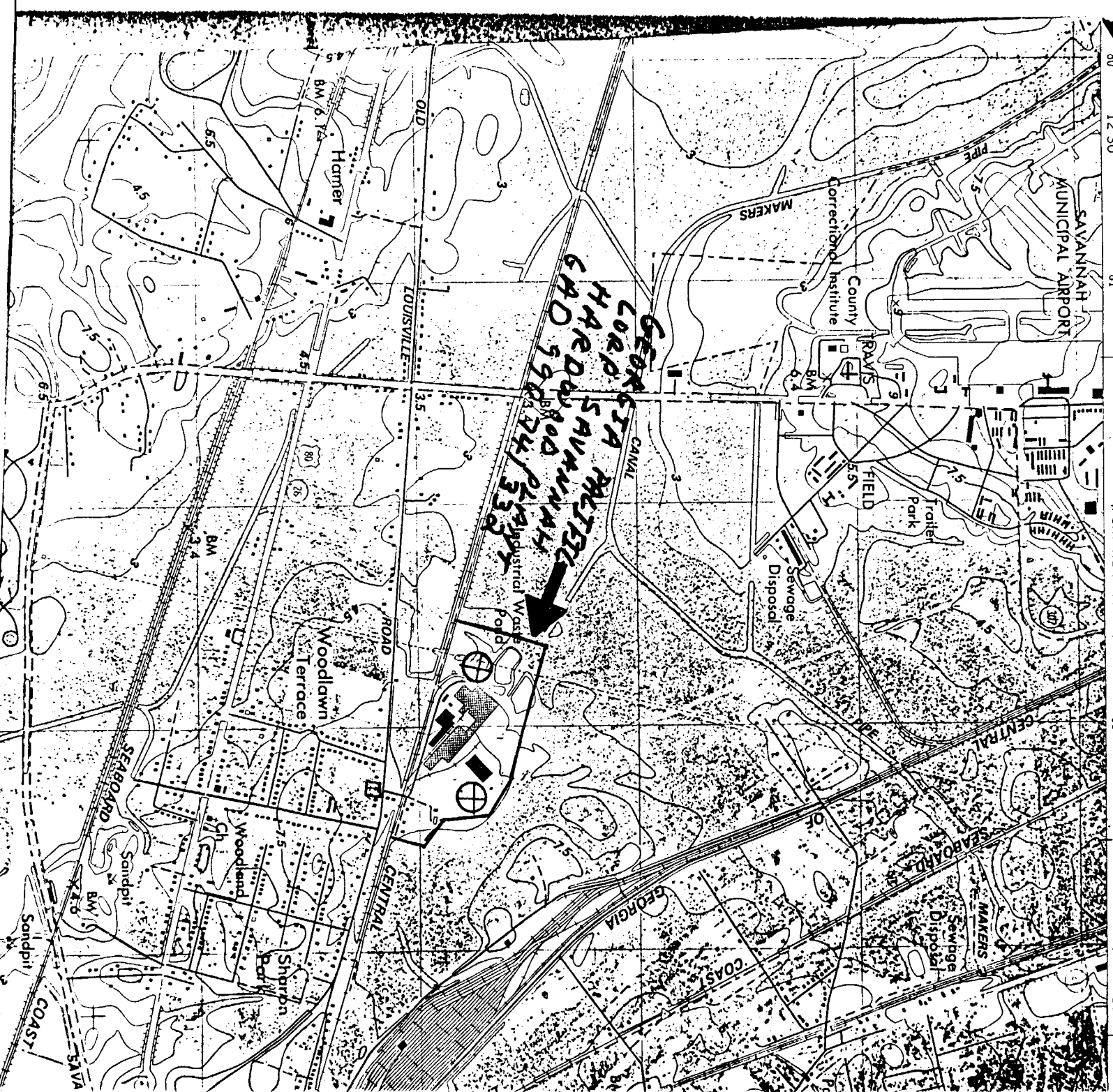
III. TOTAL POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

IV. COMMENTS

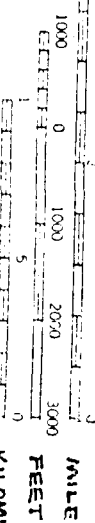
V. SOURCES OF INFORMATION (Cite specific references: e.g., state files, sample analysis, reports)

Telephone Memo - April 30, 1985 to Mr. Leon Stephenson, Plant Superintendent,  
Georgia Pacific Corporation - Savannah.

⊕ Approximate location of solvent dump at area where they was dumped from 1959-1965  
 12 30' 81 83 10



SCALE



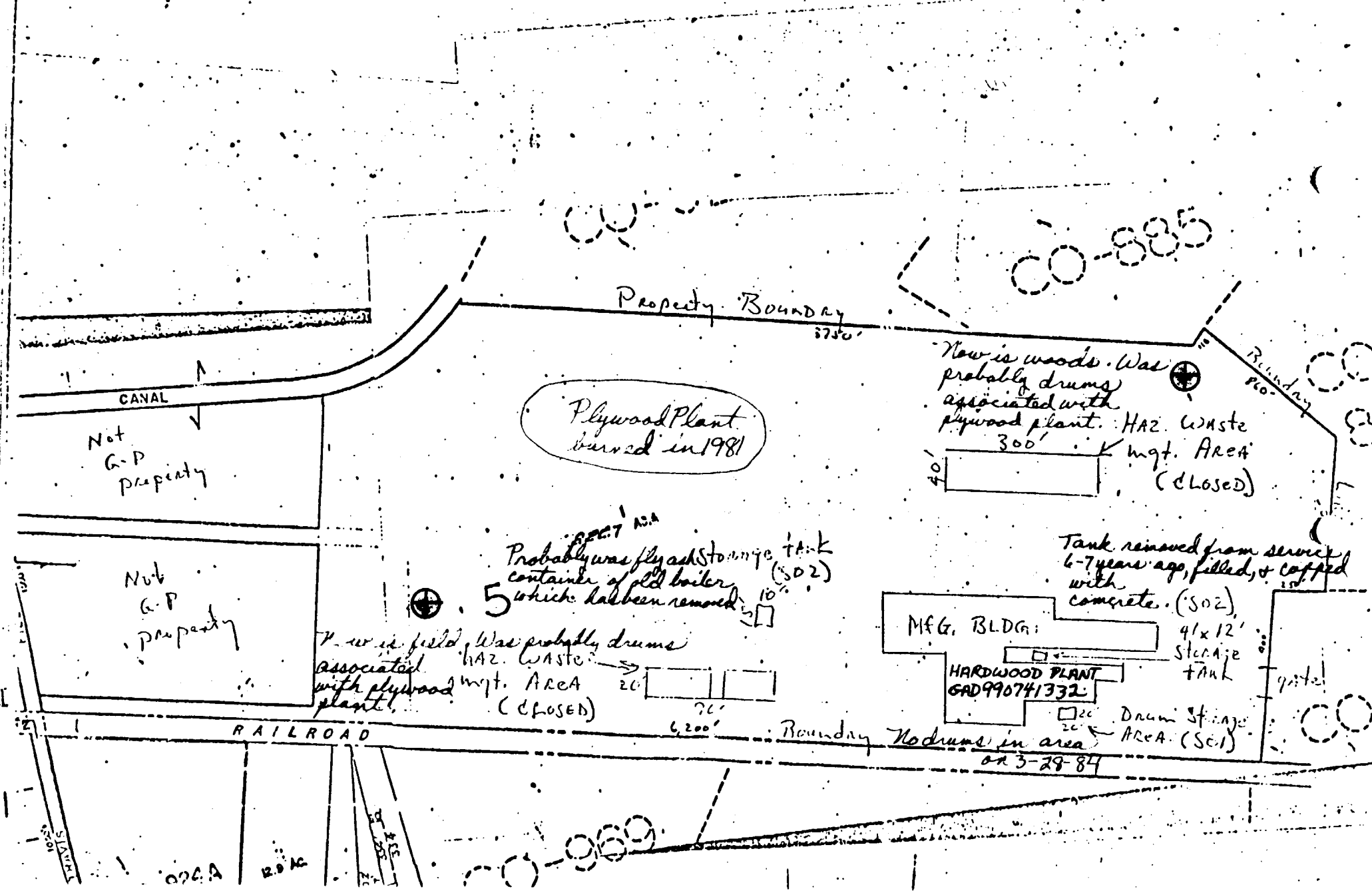
QUAD NAME: GARDEN CITY, GA  
 SERIES: 7.5 minute  
 YEAR: 1980

SEE ATTACHED  
 SKETCH OF  
 GP PROPERTY  
 BOUNDARY

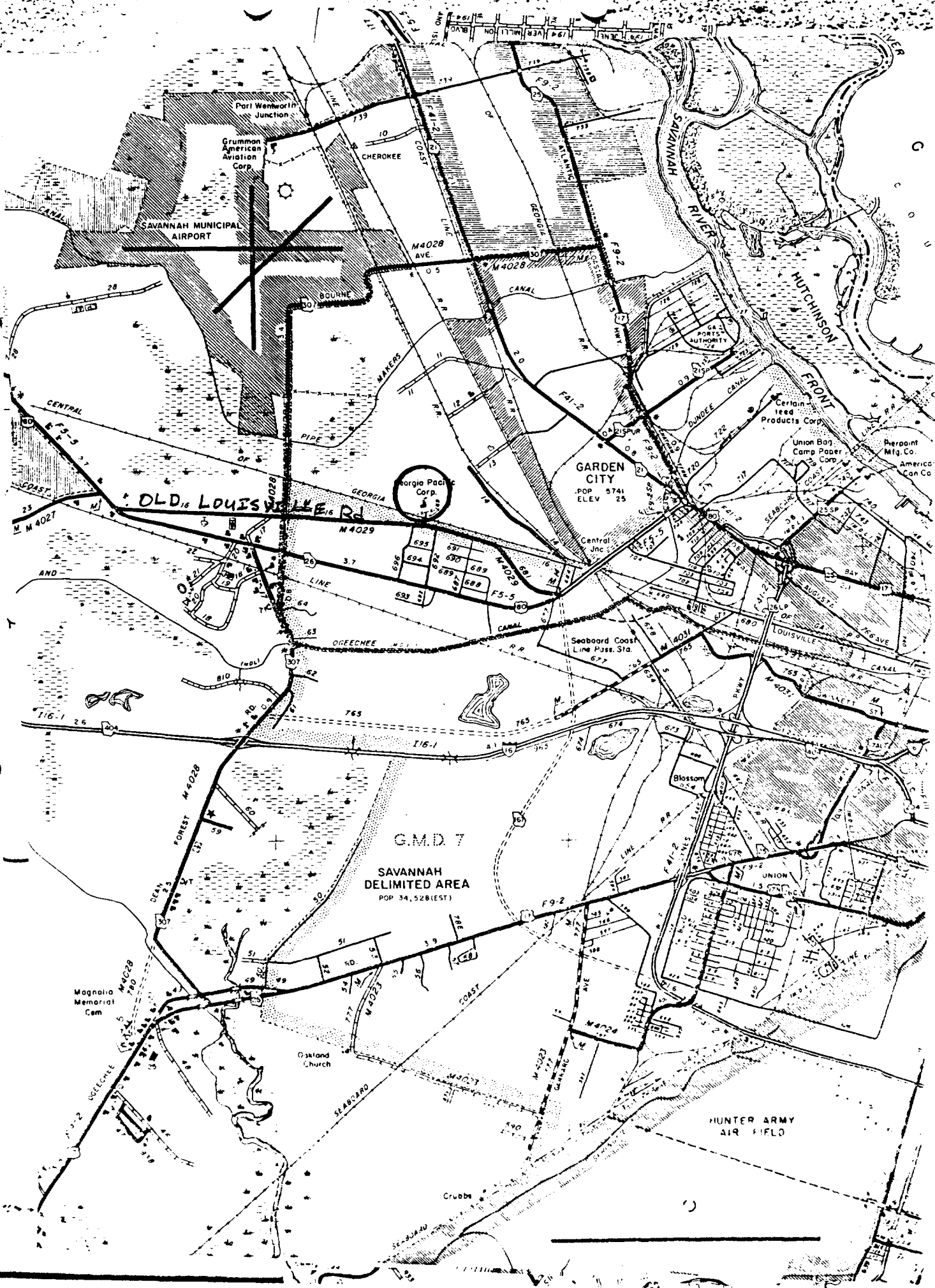
**POOR LEGIBILITY**

**PORTIONS OF THIS DOCUMENT  
MAY BE UNREADABLE, DUE TO  
THE QUALITY OF THE  
ORIGINAL**

EPA I.D. NO: GAD990741332







Part Wentworth Junction  
Grumman American Aviation Corp.  
SAVANNAH MUNICIPAL AIRPORT

Georgia Pacific Corp.

GARDEN CITY  
POP 5741  
ELEV 25

G.M.D. 7  
SAVANNAH  
DELIMITED AREA  
POP 34,528 (EST)

HUNTER ARMY  
AIR FIELD

SPECIAL  
ROUTING

**TELECON**

BY: Williams, J OF: GA. E.P.D.

FILE# GAO 990741332

DATE: 4-30-85

INCOMING ☐ OUTGOING ☒

PERSON TALKED WITH: Mr. Leon Stephenson-

OF: Georgia Pacific Corp

PHONE# 912-964-2230

SUBJECT: Pre RLRA disposal practices at the  
Georgia Pacific Corp - Savannah, GA.

DETAILS OF CONVERSATION

According to Mr. Stephenson, Georgia Pacific began operations in 1949. Plywood was produced from 1949 to 1956. No on site dumping occurred before 1959. Hardwood paneling was produced from 1957 to the present date. Solvents and lacquer paint base coat materials were disposed on site from 1959 to 1965 in two distinct areas according to Mr. Stephenson. These wastes were openly dumped onto the soil and allowed to percolate through. All processes from 1980 to the present date use water based materials and are essentially non-hazardous.

SPECIAL  
ROUTING

**TELECON**

BY: Williams, J. OF: G.A.E.P.D  
FILE# Georgia Pacific Corp-Savannah

DATE: 5-3-85

INCOMING ☐ OUTGOING ☒ 6:54

PERSON TALKED WITH: Larry Rodgers

OF: G.A.E.P.D. Brunswick Region

PHONE # 6154-365-7284

SUBJECT: Community Drinking Water Supplies for local  
residents in Garden City, Georgia

DETAILS OF CONVERSATION

According to Larry Rodgers of the G.A.E.P.D, several residents that live within 1 1/2 miles of the Georgia Pacific facility in Savannah depend on local drinking water wells. The woodland terrace residential area ~~is~~ located just south of the G.P. facility is supplied by the Garden City Water System. Some private wells are also located in the woodland terrace area.



JOE D. TANNER  
Commissioner

# Department of Natural Resources

ENVIRONMENTAL PROTECTION DIVISION

270 WASHINGTON STREET S W  
ATLANTA, GEORGIA 30334

## TRIP REPORT

April 5, 1984

J. LEONARD LEDBETTER  
Division Director

Site Name and Location: Georgia - Pacific Corp.  
GAD990741332  
Old Louisville Road  
Savannah, Georgia 31498

Trip By: Martha G. Pierce *MGP*

Date of Trip: March 28, 1984

Accompanied By: None

Officials Contacted: Tom Stevens, Environmental Engineer  
133 Peachtree Street, N.E.  
P.O. Box 105605  
Atlanta, Georgia 30348

and

Bob Smith, Plant Manager  
P.O. Box 367  
Savannah, Georgia 31498

### Reference:

February 14, 1984 letter requesting to withdraw the Part A permit application and to change status to Small Quantity Generator.

### Comments:

Mr. Stevens and Mr. Smith explained the operation and accompanied me on an inspection of the plant. Georgia-Pacific manufactures interior hardwood paneling for buildings. The process consists of gluing wood sheets together with urea formaldehyde resin, heat, and pressure to form the panels, filling and covering blemishes, cutting the panels to size, and then alternately sanding, priming, drying, staining and sealing the panels. All wood, urea formaldehyde resin, primers, stains, and sealers are purchased off-site. All primers, stains, and sealers are water-based so that all the equipment is cleaned with water. The cleaning waste is used in the plant boiler and scrubber. Primers, stains, and sealers are filtered for reuse. The solids trapped on the filters are stored in open metal hoppers along each production line until used as fuel for the boiler along with wood scraps and sawdust. A composite sample of the solids was collected from the hopper over a two week period and was analyzed. (See attachment.) No hazardous waste is generated in this process. Mr. Smith and Mr. Stevens also said that the amount of waste generated is well below the Small Quantity Generator limit.

Page Two (2)  
TR-Georgia Pacific  
April 5, 1984

The Part A application filed for this facility listed D001, F001, and D000 (other wastes). At that time (November 14, 1980), the plant used oil-based primers, stains, and sealers and solvents to clean the equipment. Over a three to four year period, the plant changed from oil-based to the present all water-based process so that no D001, F001, or D000 is now generated. The facility drawing of the Part A showed the following hazardous waste management areas: two SO<sub>2</sub> (tank), one SO<sub>1</sub> (drum), and two "closed" areas. Mr. Smith and Mr. Stevens showed me these areas. The two "closed" areas are now fields and woods. Mr. Smith said, to his knowledge, that these two areas were not associated with the Hardwood Plant but were probably associated with the Plywood Plant that burned in 1981 and was never re-opened. Mr. Smith thinks that one of the tank storage areas was probably listed for the fly ash container for the old boiler which has been removed. The other tank was removed from service six to seven years ago, filled with dirt, and capped with concrete. No drums were stored in the area designated for SO<sub>1</sub> because no hazardous waste is generated.

Conclusions:

The Georgia-Pacific Savannah Plant does not generate hazardous waste and does not require a TSD permit.

Recommendations and Follow-Up Required:

Approve withdrawal of the Part A and change status to Small Quantity Generator as requested by Georgia-Pacific in February 14, 1984 letter.

Photographs: None

Samples: None

Reviewed By: *mu*

Attachments: Waste Analysis  
Prefinish Material  
See ISS Inspection Checklist

MP:djb:34

File: Georgia-Pacific - Savannah (R)

PREFINISH MATERIALS

PRINT LINE I

631-Y5-331	YELLOW BASECOAT
631-W5-328	WHITE BASECOAT
631-R5-332	RED BASECOAT
631-B5-333	BLACK BASECOAT
601-D5-073	FILLER
640-B5-188	BLACK FLOOD COAT
681-C5-083	H2O TOPCOAT
699-C5-1026	CLEAR INK
699-D5-1027	AMBER INK TINT
699-R5-1030	RED TINT
699-Y5-1028	YELLOW TINT
699-B5-1029	BLACK TINT
934-B5-468	BLACK EMBOSS INK

LINE II HARDWOOD

621-C5-013	CLEAR SPRAY BRUSH
626-D5-024	BROWN H2O STAIN
626-Y5-025	YELLOW H2O STAIN
626-B5-016	BLACK H2O STAIN
63-R5-002	RED STAIN CONC.
63-Y5-005	YELLOW STAIN CONC.
63-B5-006	BLACK STAIN CONC.
699-C5-1026	CLEAR
699-D5-1027	AMBER
699-Y5-1028	YELLOW
699-B5-1029	BLACK
699-R5-1030	RED
681-C5-083	H2O TOPCOAT
50-P55-1691	CATALYST

James W. Anderson, Ph.D.  
President

Janette M. Davis  
Chief Chemist, L.P.

# SAVANNAH LABORATORIES AND ENVIRONMENTAL SERVICES, INC.

P.O. Box 13842 • Savannah, Ga. 31406

912/354-7858



## REPORT OF ANALYSIS

TO: Georgia-Pacific Corporation  
Attn: Bob Smith  
P. O. Box 367  
Savannah, GA 31402

REPORT NO. 6487

DATE RECEIVED 03/01/84

SAMPLED BY client

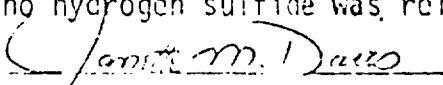
IDENTIFICATION: Pref lime I & II waste

METHODS: "Test Methods for the Evaluation of Solid Waste,  
Physical/Chemical Methods SW-846-U.S. EPA."

### CHARACTERISTICS OF HAZARDOUS WASTE (RCRA)

<u>EPA No.</u>	<u>Parameter</u>	<u>Results</u>	
D001	Ignitability	<u>&gt;140°F</u>	
D002	Corrosivity	<u>pH = 7.9</u>	
D003	Reactivity:		
	Total Cyanide Content (ppm dry weight) (SW846, EPA Method 9010)	<u>&lt;0.1</u>	
	Sulfide Content (ppm dry weight) (SW846, EPA Method 9030)	<u>*No hydrogen sulfide released upon acidification</u>	
	EP Toxicity:		
	% that passes 9.5 mm sieve	<u>100</u>	
	% solids	<u>12</u>	
	initial pH/final pH (units)	<u>5.0/5.0</u>	
	ml of conc. acetic acid/liter extract	<u>5.4</u>	
<u>EPA No.</u>	<u>Contaminant</u>	<u>Maximum Permissible Concentration (mg/l)</u>	<u>Level in Extract (mg/l)</u>
D004	Arsenic	5.0	<u>0.023</u>
D005	Barium	100.0	<u>0.13</u>
D006	Cadmium	1.0	<u>&lt;0.001</u>
D007	Chromium	5.0	<u>0.14</u>
D008	Lead	5.0	<u>&lt;0.005</u>
D009	Mercury	0.2	<u>&lt;0.0002</u>
D010	Selenium	1.0	<u>0.025</u>
D011	Silver	5.0	<u>&lt;0.001</u>

\*Due to the color of this sample we were unable to determine a quantitative measure for hydrogen sulfide. A qualitative analysis, utilizing lead acetate paper, of this sample indicated no hydrogen sulfide was released upon acidification.

  
Janette M. Davis

DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION DIVISION

WASTE MANAGEMENT DATA SHEET

GAD990741332 Savannah Savannah - Chatham

NAME AND LOCATION OF FACILITY

GEORGIA-PACIFIC CORPORATION - SAVANNAH HARDWOOD PLYWOOD PLANT  
OLD LOUISVILLE ROAD  
SAVANNAH, GEORGIA 31498

PERSON TO CONTACT

(ENTER THE NAME, ADDRESS, TITLE AND BUSINESS TELEPHONE NUMBER OF  
THE PERSON TO CONTACT REGARDING INFORMATION SUBMITTED ON THIS FORM).

TOM B. STEVENS - ENVIRONMENTAL ENGINEER  
P. O. BOX 105603  
ATLANTA, GEORGIA 30348  
404-521-5080

DATES OF WASTE HANDLING

(ENTER THE YEARS THAT YOU ESTIMATE WASTE TREATMENT, STORAGE OR DISPOSAL  
BEGAN AND ENDED AT THE SITE. IF YOU SELECTED A FACILITY OFF-SITE PLEASE  
NOTE AND EXPLAIN IN "COMMENTS" SECTION.

PLANT START-UP DATE 1949

GENERAL TYPE OF WASTE

- |                     |                                  |
|---------------------|----------------------------------|
| 1- ( ) ORGANICS     | 7- ( ) BASES                     |
| 2- ( ) INORGANICS   | 8- ( ) PCB's                     |
| 3- ( ) SOLVENTS     | 9- ( ) MIXED MUNICIPAL WASTE     |
| 4- ( ) PESTICIDES   | 10- ( ) UNKNOWN                  |
| 5- ( ) HEAVY METALS | 11- ( ) OTHER (SPECIFY)          |
| 6- ( ) ACIDS        | 12- NO HAZARDOUS WASTE GENERATED |

WASTE QUANTITY (ESTIMATED)

HAS THERE EVER BEEN A SPILL OR DISCHARGE OF A HAZARDOUS SUBSTANCE FROM YOUR  
FACILITY? (BRIEFLY EXPLAIN THE NATURE OF THE RELEASE).

NO



COMMENTS

(IF THERE IS ANY COMMENTS THAT YOU BELIEVE WOULD CLARIFY THE PAST WASTE HANDLING PRACTICES OF YOUR FACILITY OR OF FACILITIES YOU SELECTED TO HANDLE YOUR WASTE, PLEASE ELABORATE IN THE SPACE PROVIDED).

NO

SIGNATURE AND TITLE TOM B. STEVENS 404-521-5080  
NAME TELEPHONE  
133 PEACHTREE ST. N.E. - 16th Floor  
STREET  
ATLANTA, GEORGIA 30303  
CITY STATE ZIP CODE  
Tom B. Stevens 3-22-85  
SIGNATURE DATE